TRAFFIC PLANNING AND DESIGN, INC.

Est. 1989

Allentown Arena and City Center Development

Parking Analysis

City of Allentown, Lehigh County, PA

For Submission To:

City of Allentown

Last Revised: February 7, 2014

TPD# HCSD.A.00001

812 W. Hamilton Street | Suite 402 | Allentown, PA | 18101 | 610.625.4242 | TPD@TrafficPD.com

ALLENTOWN ARENA AND CITY CENTER DEVELOPMENT PARKING ANALYSIS

For Submission to:

**Allentown Commercial Development Authority,
City of Allentown, Lehigh County, PA**

Prepared For:

**Allentown Neighborhood
Improvement Zone
Development Authority**

**435 Hamilton Street
Allentown, PA 18101**

February 7, 2014
TPD # HCSD.A.00001

Prepared By:

**Traffic Planning and Design, Inc.
812 W. Hamilton Street, Suite 402
Allentown, Pennsylvania 18101**

**Phone: (610) 625-4242
Fax: (610) 625-4250
E-mail: TPD@TrafficPD.com
Web Site: www.trafficpd.com**

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Traffic Planning and Design, Inc. (TPD) has prepared a Parking Analysis to examine the potential parking impact associated with the proposed Arena and City Center development on the parking facilities in the City of Allentown, Lehigh County, PA. The findings of the Parking Analysis are as follows:

1. This parking analysis includes the following proposed developments:
    a. At the intersection of 7th Street & Hamilton Street, a new mixed-use complex on the northwest corner will include the following land uses:
        - Multi-use arena;
        - 230,520 s.f. medical office space;
        - 180-room hotel;
        - 8,820 s.f. restaurant;
        - 13,060 s.f. restaurant;
        - Two parking decks with a total of 867 parking spaces.

    b. At the intersection of 7th Street & Hamilton Street, a new office building ("Two City Center") on the northeast corner will include the following land uses:
        - 272,000 s.f. general office space;
        - 8,000 s.f. sit-down restaurant;
        - 20,000 s.f. retail space;
        - 56 below grade parking spaces.

    c. At the intersection of Hamilton Street and Law Street, a new office building ("Three City Center") on the northeast corner will include the following land uses:
        - 175,000 s.f. office space;
        - 106 below grade spaces.

    d. At the intersection of 7th Street & Linden Street, a new mixed-use complex ("Four City Center") on the southeast corner will include the following land uses:
        - 168 apartments;
        - 37,500 s.f. complementary first floor retail space;
        - 96 below grade parking spaces.

2. It is anticipated that all development outlined above will be completed in 2014. The proposed arena will accommodate minor league hockey games, concerts and other events. The arena capacity for a hockey game will be 8,500 attendees and the capacity for concerts and other events will be 10,500 attendees.

3. In association with the proposed development, the Allentown Parking Authority's Linden Deck will be expanded to include an additional 225 parking spaces. The deck is located on the southeast corner of Linden Street & Church Street.

4. The proposed study area is bound by North Tenth Street to the west, North Fourth Street to the east, Chew Street to the north and Union Street to the South. All existing parking inventories were counted within these boundaries.

5. The Allentown Parking Authority owns and operates five public parking garages in the study area: the Spiral Deck, Walnut Deck, Linden Deck, Government Deck, and Transportation Center. The Linden Deck is currently closed for renovations. The remaining garages include a total of 2,129 parking spaces.

6. Based on parking counts supplied to TPD by the Allentown Parking Authority (APA), it was determined that the existing <u>weekday</u> utilization rates of the public parking garages is as follows: <u>55%</u> at 9:00 AM, <u>56%</u> at 12:00 PM, <u>16%</u> at 5:00 PM and <u>8%</u> at 7:00 PM.

7. Based on parking counts supplied to TPD by the Allentown Parking Authority (APA), it was determined that the existing <u>weekend</u> utilization rates of the public parking garages is as follows: <u>7%</u> at 9:00 AM, <u>6%</u> at 12:00 PM, <u>8%</u> at 5:00 PM and <u>8%</u> at 7:00 PM.

8. It is TPD's understanding that the following additional parking facilities are being constructed in conjunction with the proposed development:
   - The proposed arena complex will include two parking garages: a 742-space above ground garage and a 125-space below ground garage.
   - Two City Center will include 56 on-site parking spaces.
   - Three City Center will include 106 on-site parking spaces.
   - Four City Center will include 96 on-site parking spaces.
   - The Linden Deck, which is owned and operated by the Allentown Parking Authority, is being expanded from 327 parking spaces to 552 parking spaces.

9. A parking facility will be perceived as full at somewhat less than its actual capacity. The industry standard which is generally considered full is 85%. The cushion of spaces reduces the need to search the entire system for the last few parking spaces, thus reducing patron frustration. Parking garages operating above this capacity may lead to patron frustration and a perception of limited parking availability downtown.

10. Upon full build-out of the arena and City Center development, all public parking garages will operate at full capacity on a typical weekday during working hours. During the mid-afternoon and mid-morning peak periods of parking demand, all public parking garages will have an occupancy rate of greater than 85 percent.

11. For hockey games and other arena events with approximately 8,500 attendees, all public parking garages are projected to operate at full capacity with the exception of the Government Deck.

12. For "concert-type events" with 10,500 attendees, all public parking garages are projected to be over capacity. Other on-street and off-street parking facilities will be needed to accommodate the parking demand.

13. Based upon this Parking Analysis, Traffic Planning and Design Inc. (TPD) offers the following recommendations:

- As a standard practice with the construction of stadiums, arenas etc., it is necessary to establish an Event Management Plan. A detailed event management plan should be implemented for events at the proposed arena. Event staff may utilize traffic cones, auxiliary signage, and flagging to efficiently guide traffic to event parking. Provide detailed arrival and departure traffic flow maps for the major public parking facilities in the downtown area.
- Provide wayfinding signage on all major approach routes. Within the immediate vicinity of the arena, signage should direct motorists directly to the appropriate parking facilities.
- Utilize a parking guidance and information system for arena events. The system would employ variable message signs to direct motorists to garages with available parking spaces based on real-time occupancy data. TPD recommends that the variable message signs be deployed at key locations where arriving motorists must decide which garage to approach. For example, variable signs may be placed on Seventh Street on the southbound approach to Linden Street, or on Hamilton Street at the eastbound approach of Ninth Street.
- Provide pedestrian oriented wayfinding signage indicating the location of the arena and other downtown attractions at all public parking decks and other key locations throughout the study area.
- The project team should coordinate with the Allentown Parking Authority to examine the existing methods of payment and determine if any improvements can be made to allow for maximum traffic flow into and out of existing parking facilities. An alternative payment system may allow for improved ingress and egress from the garage before and after events.
- The Allentown Parking Authority or arena management team may wish to encourage utilization of the Government Deck during events by offering free/reduced parking rates or establishing shuttle service along Hamilton Street.
- The arena management team should consider overflow parking options for large events. The existing surface lots and on-street parking downtown may be utilized to handle excess parking demand, but advance planning is needed to avoid patron frustration.
- To accommodate peak daytime parking demand, new downtown employers should consider investigating contract parking at existing public/private surface lots.

INTRODUCTION

Traffic Planning and Design, Inc. (TPD) has prepared the following Parking Analysis to examine the potential parking impact associated with the proposed Arena and City Center Development on the parking facilities in the City of Allentown, Lehigh County, Pennsylvania. This parking analysis includes the following proposed developments:

1. At the intersection of 7th Street & Hamilton Street, a new mixed-use complex on the northwest corner will include the following land uses:
   - Multi-use arena;
   - 230,520 s.f. medical office space;
   - 180-room hotel;
   - 8,820 s.f. restaurant;
   - 13,060 s.f. restaurant;
   - Two parking decks with a total of 867 parking spaces.
2. At the intersection of 7th Street & Hamilton Street, a new office building ("Two City Center") on the northeast corner will include the following land uses:
   - 272,000 s.f. general office space;
   - 8,000 s.f. restaurant;
   - 20,000 s.f. retail space;
   - 56 below grade parking spaces.
3. At the intersection of Hamilton Street and Law Street, a new office building ("Three City Center") on the northeast corner will include the following land uses:
   - 175,000 s.f. office space;
   - 106 below grade parking spaces.
4. At the intersection of 7th Street & Linden Street, a new mixed-use complex ("Four City Center") on the southeast corner will include the following land uses:
   - 168 apartments;
   - 37,500 s.f. first floor retail space;
   - 96 below grade parking spaces.

The proposed arena will accommodate minor league hockey games, concerts, and other events. The arena capacity for a hockey game will be 8,500 attendees, and the capacity for concerts and other events will be 10,500 attendees. It is anticipated that all development outlined above will be completed in 2014. A map of the study area is shown in **Figure 1**.

The purpose of this parking analysis is to identify the highest peak period parking demands for the proposed arena and City Center developments and confirm whether the existing and proposed number of parking spaces will adequately accommodate the highest peak period parking demand.

EXISTING PARKING FACILITIES

A field view was conducted of the existing parking facilities within the study area. The parking inventory consisted of all the parking decks, surface lots and on-street parking that is available within the study area. The study area is bound by North 10th Street to the west, North 4th Street to the east, Chew Street to the north and Union Street to the South. All existing parking inventories were counted within these boundaries. TPD also obtained parking information from the Allentown Parking Authority and compared the information with the field data that was collected to determine which parking facilities were designated as public versus private ownership. A summary of the detailed inventory, including the existing parking decks and surface lots, can be found in **Appendix A**. The summary identifies the number of parking spaces available for each facility, ownership, the operation of each facility, as well as the parking rates per hour, daily and monthly if they were available. A map of existing public and private parking facilities within the study area limits is included in **Exhibit A**.

The Allentown Parking Authority (APA) owns and operates five parking garages in downtown Allentown: the Linden Deck, Walnut Deck, Spiral Deck, Government Deck and the Transportation Center. In addition to the five (5) public parking decks owned by the Parking Authority there are an additional twenty-nine (29) surface parking lots in the downtown area. Thirteen (13) of the twenty-nine (29) surface lots are within the study area limits. The remaining seventeen (16) surface lots are outside of the study area limits, however they still could be used by patrons visiting the proposed development. It should be noted that these remaining surface lots outside the study area are smaller lots and consist of approximately 3 to 61 parking spaces per lot.

Table 1A summarizes the total number of existing public parking spaces in the study area, including both the garage decks and the surface lots.

TABLE 1A
EXISTING PUBLIC PARKING INVENTORY SUMMARY

Public Parking Garages	TOTAL SPACES
Spiral Deck	700
Linden Deck[1]	0
Walnut Deck	514
Government Deck	445
Transportation Center	470
Total Public Garage Spaces	**2,129**
Public Surface Lot spaces	**1,069**
TOTAL PUBLIC PARKING SPACES	***3,198***

[1] Linden Deck is currently closed for construction, proposed to provide 552 parking spaces

As shown in **Table 1A**, the total number of existing public parking spaces in the study area, including the parking decks and the public surface lots is **3,198**. It should be noted that the Linden

Deck is currently closed and is in the process of being reconstructed to add additional parking spaces. Following the renovations, the Linden Deck will consist of 552 parking spaces. The renovations at the Linden Deck are expected to be completed by the spring of 2014.

Table 1B summarizes the total number of existing private parking spaces in the study area, including both the garage decks and the surface lots.

TABLE 1B
EXISTING PRIVATE PARKING INVENTORY SUMMARY

Private Parking Garages	TOTAL SPACES
Chew Street Parking Deck	595
PPL Parking Deck	436
Morning Call Parking Deck[1]	250
Lehigh County Employee Garage[1]	300
Total Private Garage Spaces	**1,581**

[1] The number of parking spaces was estimated

In addition to the private parking garages, there are several privately owned surface lots in the study area. Some of the surface lots are associated with a specific land use, and other lots are available for contract parking on a monthly basis.

Existing Parking Rates

The Allentown Parking Authority (APA) oversees the public parking facilities in downtown Allentown. Most of the APA public parking facilities offer hourly and daily rates and in some cases offer long-term monthly contracts. The general rates of the APA public parking facilities are $1 per hour with a maximum of $6 to $8 per day. Monthly contract parking is available at most of the public parking facilities. The monthly rates range from $25 to $75 per month. The existing parking rates are summarized in **Appendix A**.

On-Street Parking

A review of the on-street parking was included in the parking field inventories. The inventory was taken along the main streets within the study area limits. The on-street parking areas were broken into number of parking spaces per city block. **Table 2** summarizes the total number of on-street parking spaces within the study area.

The majority of on-street parking spaces are metered. Parking meters are enforced Monday through Saturday from 8:00 A.M. to 6:00 P.M. The rate is $1.00 per hour.

TABLE 2
ON-STREET PARKING SUMMARY

Parking Along Street	Between City Streets	Number of Spaces
10th Street	Union Street & Chew Street	**87**
9th Street	Union Street & Chew Street	**113**
8th Street	Union Street & Chew Street	**121**
7th Street	Union Street & Chew Street	**109**
6th Street	Union Street & Chew Street	**108**
5th Street	Union Street & Chew Street	**144**
4th Street	Union Street & Chew Street	**131**
Union Street	4th Street & 10th Street	**32**
Walnut Street	4th Street & 10th Street	**93**
Hamilton Street	4th Street & 10th Street	**161**
Linden Street	4th Street & 10th Street	**107**
Turner Street	4th Street & 10th Street	**195**
Chew Street	4th Street & 10th Street	**160**
TOTAL ON-STREET PARKING SPACES		**1,561**

As shown in **Table 2**, there are a total of approximately 1,561 on-street parking spaces, including metered and non-metered spaces, located within the study area. An on-street parking plan was developed and shows the number of on-street parking spaces on a block-by-block basis. The On-Street Parking Inventory Plan can be found in **Exhibit B.**

EXISTING PARKING DEMAND

TPD worked closely with the Allentown Parking Authority (APA) to determine historical parking demand utilization rates within the APA parking garages. The Allentown Parking Authority provided TPD with count data for the morning, afternoon and evening peak hours for the weekday and weekend time periods. The purpose of gathering this information was to determine the percentage of spaces occupied in the major public parking garages during the peak periods. The count data was collected on the following days:

- Wednesday, October 9, 2013;
- Thursday, October 10, 2013;
- Friday, October 11, 2013;
- Saturday, October 12, 2013;
- Sunday, October 13, 2013;
- Tuesday, October 15, 2013;
- Wednesday, October 16, 2013;
- Thursday, November 7, 2013;
- Friday, November 8, 2013.
- Saturday, November 9, 2013;
- Saturday, November 10, 2013.

Table 3 summarizes the number of occupied spaces in the public parking garages during the weekday peak time periods. The number of parking spaces occupied is based on the average number of parking spaces occupied for the weekday data supplied from the Allentown Parking Authority. The data supplied by the Allentown Parking Authority can be found in **Appendix C**.

TABLE 3
SUMMARY OF THE WEEKDAY COUNT DATA
FOR THE PUBLIC PARKING GARAGES

Time Period	Occupied Spaces					Occupancy Rate
	Spiral Deck	Walnut Deck	Government Deck	Transportation Center	TOTAL	
Total Spaces	**700**	**514**	**445**	**470**	***2,129***[1]	
9:00 A.M.	479	323	212	153	***1,167***	**55%**
12:00 P.M.	494	329	197	182	***1,202***	**56%**
5:00 P.M.	133	112	34	64	***343***	**16%**
7:00 P.M.	34	74	23	45	***176***	**8%**

1. Linden deck is currently under construction and therefore no parking data was collected and the deck is not included in the occupancy calculations.

Table 4 summarizes the number of occupied spaces in the public parking garages during the weekend peak time periods. The number of parking spaces occupied is based on the average number of parking spaces occupied for the weekend data supplied from the Allentown Parking Authority.

TABLE 4
SUMMARY OF WEEKDEND COUNT DATA
FOR THE PUBLIC PARKING GARAGES

Time Period	Occupied Spaces					Occupancy Rate
	Spiral Deck	Walnut Deck	Government Deck	Transportation Center	TOTAL	
Total Spaces	**700**	**514**	**445**	**470**	***2,129***[1]	
9:00 A.M.	25	85	25	7	***142***	**7%**
12:00 P.M.	34	50	19	15	***118***	**6%**
5:00 P.M.	32	57	16	58	***163***	**8%**
7:00 P.M.	32	54	16	59	***161***	**8%**

1. Linden deck is currently under construction and therefore no parking data was collected and the deck is not included in the occupancy calculations.

PARKING DEMAND CALCULATIONS

ULI Shared Parking Manual

Parking demand calculations for the proposed development are based on information contained in the Urban Land Institute (ULI) *Shared Parking* manual, Second Edition. Shared parking is defined as parking spaces that can be used to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two conditions: (1) variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses; and (2) relationships among the land uses that result in visiting multiple land uses on the same auto trip.

To determine the daily and hourly parking demand associated with the proposed development, TPD utilized the following methodology, as outlined in the ULI *Shared Parking* manual:

- Select the appropriate base parking demand ratios for each land use and separate into customer and employee components;
- Adjust ratios for non-captive market adjustments;
- Adjust ratios for modal split adjustments;
- Apply both monthly and hourly adjustments for each land use.

Base Parking Demand Ratios

Base parking demand ratios, as found in the ULI shared parking model, were used to determine the parking requirements for the development as if each land use were a free-standing development and no shared parking was to take place. Essentially, it is the number of parking spaces that should be provided per unit of land use, if parking serves only that land use. The ratios recommended within this report are based on the expected peak accumulation of vehicles at the peak hour on a design day, assuming nearly 100 percent modal split to auto use and minimal ridesharing. **Table 5** shows the base ratios broken down for visitors and employees for a weekday and weekend. For residential land uses, residents are considered employees.

TABLE 5
BASE PARKING DEMAND RATIOS

Land Use	Independent Variable	Weekday		Weekend		Source	Total	
		Visitor	Employee	Visitor	Employee		Weekday	Weekend
Shopping Center	57,500 SF	2.90	0.70	3.20	0.80	ULI	3.60	4.00
Fine/Casual Restaurant	29,880 SF	15.25	2.75	17.00	3.00	ULI	18.00	20.00
Arena	8,500 seats	0.27	0.03	0.30	0.03	ULI	0.30	0.33
Hotel-Leisure	180 rooms	0.90	0.25	1.00	0.18	ULI	1.15	1.18
Residential (Rental)	168 units	0.15	1.50	0.15	1.50	ULI	1.65	1.65
Office	447,000 SF	0.21	2.67	0.02	0.27	ULI	2.88	0.29
Medical/Dental Office	230,520 SF	2.15	1.05	2.15	1.05	ITE	3.20	3.20

Notes: Medical Office rate of 3.20 used from ITE *Parking Generation* Manual (Average)
For residential land uses, residents are considered employees

Monthly Variation

The ULI *Shared Parking* manual provides monthly adjustment factors for each land use. For example, the peak parking demand for retail uses occurs in December, while peak demand for an arena occurs from February to May. There is no monthly variation associated with residential land uses and minimal variation associated with office buildings. The appropriate monthly variation factors were applied.

Hourly Variation

The ULI *Shared Parking* manual provides hourly adjustment factors for each land use. For example, the peak parking demand for an office building is during business hours and peak parking demand for residential uses peaks late at night. The appropriate hourly variation factors were applied.

Non-Captive Adjustment

For mixed-use developments, especially in a downtown areas, the ULI shared parking publication allows for non-captive adjustments. The non-captive ratio is a factor modified when designing a shared parking model. “Captive Market” was originally borrowed from market researchers to describe people who are already present in the immediate vicinity and are likely patrons of a second use. The proposed development will include the arena, a hotel, several restaurants, retail spaces, office spaces and a small residential component. It is expected that some visitors will utilize two or more land uses without moving their vehicle, therefore resulting in shared parking between land uses associated with these proposed developments. For example, if an employee of a downtown office land use visits a nearby restaurant, there usually is not any additional parking demand generated. For the purposes of this study a conservative non-captive ratio factor of 5% was applied to most of the land uses for the weekday daytime/evening hours and the weekend daytime/evening hours. The two exceptions to this, were the retail space, where a non-captive factor of 25% was applied and to the restaurant land uses, where a non-captive factor of 75% was applied to the parking analysis for the weekday daytime/evening hours and weekend daytime/evening hours.

Mode Adjustment

For mixed-use developments, the ULI shared parking publication allows for a mode adjustment which can be made to urban areas such as Downtown Allentown to account for alternative modes of transportation such as walking, bicycle, limo or taxi drop-offs, ridesharing and public transportation.

Public transportation in Lehigh and Northampton Counties is provided by LANTA (Lehigh and Northampton Transportation Authority). LANTA operates a network of 23 fixed bus routes and 10 special routes throughout the Lehigh Valley. Based upon data published by LANTA, more than 380,000 people live within walking distance of a LANTA bus route. Twelve bus routes serve downtown Allentown, providing bus service to points throughout the region. The bus routes are summarized in **Table 6** below.

The Allentown Transportation Center, built in 2007, is located at the intersection of 6th Street & Linden Street, within the immediate vicinity of the proposed developments. All bus routes in the vicinity of the proposed development stop at the transportation center. Additionally, there are several bus stops along Hamilton Street and other roadways throughout the study area.

TABLE 6
LANTA BUS ROUTES SERVING DOWNTOWN ALLENTOWN

Route Number	Route Description
102	Lehigh Valley Hospital (Cedar Crest) to Bethlehem
103	Northampton to South Bethlehem
104	Emmaus to Lehigh Valley Mall
107	Crest Plaza to Downtown Bethlehem
209	Allentown Transportation Center to Crest Plaza
210	South Mall to Lehigh Valley Mall
211	Allentown Transportation Center to Presidential Village
213	Allentown Transportation Center to Fogelsville
218	Allentown Transportation Center to LCCC/Walnutport
220	Allentown Transportation Center to Easton
322	Allentown Transportation Center to Trexlertown
323	Allentown Transportation Center to Penn State Lehigh Valley

For purposes of this parking study a mode adjustment factor of 5% was applied to the parking analysis for the weekday daytime/evening hours and the weekend daytime/evening hours. These reductions are consistent with the reductions for the non-vehicular trips that were taken into account in the Traffic Analysis for this project.

Peak Parking Demand

The ULI analysis identifies peak periods of parking demand during mid-morning, mid-afternoon and evening time periods. The peak parking demand associated with the proposed land uses peak during different times of the day. The weekday mid-morning and mid-afternoon peak parking demand is driven by the proposed general office and medical office land uses. The weekday evening peak parking period is driven by an event at the proposed arena complex.

Table 7 shows the new development peak hour estimated shared parking demand during the weekday and weekend time periods along with the number of peak hour parking stalls that will be required for each peak period for the proposed developments included in the Parking Analysis. It is important to note this does not include the existing parking demand.

TABLE 7
ESTIMATED PEAK PARKING DEMAND

Weekday Estimated Peak-Hour Parking Demand							
Mid-Morning		Mid-Afternoon		Evening (Hockey Game)		Evening (Concert)	
Peak Hour	# of Spaces	Peak Hour	# of Spaces	Peak Hour	# of spaces	Peak Hour	# of spaces
10:00 AM	2,371	2:00 PM	2,394	8:00 PM	3,126[1]	**8:00 PM**	**3,668**[1]
Weekend Estimated Peak-Hour Parking Demand							
Mid-Morning		Mid-Afternoon		Evening (Hockey Game)		Evening (Concert)	
Peak Hour	# of Spaces	Peak Hour	# of Spaces	Peak Hour	# of spaces	Peak Hour	# of spaces
11:00 AM	1,324	2:00 PM	3,022	8:00 PM	3,214[2]	**8:00 PM**	**3,810**[2]

1 = Peak parking demand for the weekday
2= Peak parking demand for the weekend

The ULI shared parking demand summary calculation sheets are included in **Appendix B.**

PROPOSED PARKING FACILITIES

Table 8 summarizes the total number of proposed parking spaces that are projected to be built-out upon full-build out of the new developments in the downtown area.

TABLE 8
ADDITIONAL PROPOSED PARKING SUMMARY

Proposed Facilities	Number of Spaces
Arena Complex (two parking garages)	867
Two City Center (below grade parking)	56
Three City Center (below grade parking)	106
Four City Center (below grade parking)	96
Linden Deck[1]	552
Total Proposed Parking	**1,677**

[1] Linden Deck is currently closed for construction, proposed to provide 552 parking spaces

In summary a total of 1,677 additional parking spaces will be available upon full build-out of the proposed developments.

DISTRIBUTION OF PARKING DEMAND

To evaluate projected parking demand at each public parking garage, TPD examined the existing parking demands at each existing garage and added the parking demand associated with the proposed development. The parking assumptions for each component of the proposed development are summarized below.

Arena Complex

For the proposed hotel, it is anticipated that all parking needs will be accommodated within the two on-site parking garages. Likewise, it is assumed that all daytime arena staff will also park in the on-site garages. For the proposed Lehigh Valley Health Network sports medicine facility, it is anticipated that 85 percent of the parking demand will be accommodated in the on-site parking garages, with the remaining 15 percent utilizing the Walnut Deck. TPD assumed that the parking needs for the two restaurants would be accommodated at the adjacent Spiral Deck and Transportation Center garages.

Multiple parking garages will be required to accommodate large events at the arena. TPD anticipates that the proposed Arena Deck, the Spiral Deck and the Transportation Center will be the primary locations for event parking. It is anticipated that the Linden Deck and Walnut Deck will also be heavily used for a typical arena event. For large "concert-type" events the Government Deck will also be needed.

Two City Center

The parking needs of the office tenants will be primarily accommodated by the Linden Deck. The office tenants will also utilize the 56 on-site spaces, and TPD assumed that any additional overflow will be accommodated at the Walnut Deck. It is anticipated that traffic associated with the ground level retail/restaurant will utilize the Linden Deck or Spiral Deck.

Three City Center

Three City Center will include 106 on-site spaces. It is anticipated that the remaining parking demand will be primarily accommodated by the Government Deck and Transportation Center.

Four City Center

Four City Center will include 96 on-site spaces. It is anticipated that the remaining parking demand associated with the apartments will be accommodated at the Linden Deck and the parking needs for the retail will be met at the Linden Deck and Spiral Deck.

PROJECTED PARKING GARAGE OCCUPANCY RATES

The projected parking demand at each public parking garage during the weekday morning, afternoon and evening peak demand periods are summarized in **Tables 9-12**. It should be noted that for the evening peak parking demand period, TPD analyzed two different scenarios. **Table 11** shows the weekday evening peak parking demand assuming that the arena is hosting a hockey game with 8,500 attendees. This would be considered a full sell-out for a hockey game. In addition to this analysis, TPD also examined the potential for an event with up to 10,500 attendees, such as a major concert. **Table 12** shows the peak parking demand during the weekday evening peak assuming that the arena is hosting a concert type event with a full capacity of 10,500 attendees.

Tables 13-16 show the projected parking demand at each public parking garage during the weekend morning, afternoon and evening peak demand periods. Again, it should be noted that for the evening peak parking demand period TPD analyzed the aforementioned two arena type events and are summarized in **Tables 15 and 16**, respectively.

Effective Parking Supply

Effective parking supply is the number of occupied spaces at optimum operating efficiency. According to ULI, a parking facility will be perceived as full at somewhat less than its actual capacity. The industry standard which is generally considered full is 85%. It is appropriate to have a small cushion of spaces over the expected peak-hour accumulation of vehicles. The cushion of spaces reduces the need to search the entire system for the last few parking spaces, thus reducing patron frustration. The effective supply cushion in a system also provides for unusual peaks in activities.

As noted in the study, the existing and projected main parking facilities analyzed in this report, are anticipated to be at maximum capacity at certain times of the day, with additional parking required elsewhere.

TABLE 9
WEEKDAY (MID-MORNING) PEAK PERIOD
PROPOSED PARKING DEMAND VS SUPPLY SUMMARY

Land Use	Parking Demand[1]	Existing Parking Authority Parking Garages					Proposed New Parking			
		Walnut Deck	Linden Deck	Spiral Deck	Transportation Center	Government Deck	Arena Deck	Two City Center (Office)	Three City Center (Office)	Four City Center (Apartments)
Arena	**67**	0	0	0	0	0	67	0	0	0
LVHN Medical Office Building	**666**	100	0	0	0	0	566	0	0	0
Hotel	**144**	0	0	0	0	0	144	0	0	0
Office (Two City Center)	**697**	84	418	0	139	0	0	56	0	0
Office (Three City Center)	**464**	0	0	0	139	232	0	0	93	0
Restaurants	**82**	0	0	82	0	0	0	0	0	0
Retail	**75**	0	38	38	0	0	0	0	0	0
Apartments	**176**	0	88	0	0	0	0	0	0	88
Existing Parking Demand	**1,167**[2]	323	0	479	153	212	0	0	0	0
TOTAL	**3,538**	**507**	**544**	**599**	**431**	**444**	**777**	**56**	**93**	**88**
Garage Capacity	***3,806***	***514***	***552***	***700***	***470***	***445***	***867***	***56***	***106***	***96***
Percent Occupied		***99%***	***99%***	***86%***	***92%***	***100%***	***90%***	***100%***	***88%***	***92%***

1= ULI Shared Parking Demand
2 = Existing parking demand based on the parking counts provided by the APA for a weekday at 9AM

As shown in **Table 9**, the weekday mid-morning peak parking demand (existing plus proposed) is **3,538** parking spaces versus the parking supply of **3,806** parking spaces provided in the public parking structures. This results in an overall peak parking demand occupancy of approximately **93%**. As seen above, some of the garages will be at capacity.

TABLE 10
WEEKDAY (MID-AFTERNOON) PEAK PERIOD
PROPOSED PARKING DEMAND VS SUPPLY SUMMARY

Land Use	Parking Demand[1]	Existing Parking Authority Parking Garages					Proposed New Parking			
		Walnut Deck	Linden Deck	Spiral Deck	Transportation Center	Government Deck	Arena Deck	Two City Center (Office)	Three City Center (Office)	Four City Center (Apartments)
Arena	**90**	0	0	0	0	0	90	0	0	0
LVHN Medical Office Building	**600**	90	0	0	0	0	510	0	0	0
Hotel	**144**	0	0	0	0	0	144	0	0	0
Office (Two City Center)	**697**	84	418	0	139	0	0	56	0	0
Office (Three City Center)	**464**	0	0	0	139	232	0	0	93	0
Restaurants	**134**	0	0	134	0	0	0	0	0	0
Retail	**101**	0	51	51	0	0	0	0	0	0
Apartments	**164**	0	82	0	0	0	0	0	0	82
Existing Parking Demand	**1,202**[2]	329	0	494	182	197	0	0	0	0
TOTAL	**3,596**	**503**	**551**	**679**	**460**	**429**	**744**	**56**	**93**	**82**
Garage Capacity	***3,806***	*514*	*552*	*700*	*470*	*445*	*867*	*56*	*106*	*96*
Percent Occupied		***98%***	***100%***	***97%***	***98%***	***96%***	***86%***	***100%***	***88%***	***85%***

1= ULI Shared Parking Demand
2 = Existing parking demand based on the parking counts provided by the APA for a weekday at 12PM (noon)

As shown in **Table 10**, the weekday mid-afternoon peak parking demand (existing plus proposed) is **3,596** parking spaces versus the parking supply of **3,806** parking spaces provided in the public parking structures. This results in an overall peak parking demand occupancy of approximately **95%**. As seen above, some of the garages will be at capacity.

TABLE 11
WEEKDAY (EVENING) PEAK PERIOD
PROPOSED PARKING DEMAND VS SUPPLY SUMMARY

Land Use	Parking Demand[1]	Existing Parking Authority Parking Garages					Proposed New Parking			
		Walnut Deck	Linden Deck	Spiral Deck	Transportation Center	Government Deck	Arena Deck	Two City Center (Office)	Three City Center (Office)	Four City Center (Apartments)
Arena[3]	**2,301**	345	207	644	322	115	667	0	0	0
LVHN Medical Office Building	**100**	60	0	0	0	0	40	0	0	0
Hotel	**140**	0	0	0	0	0	140	0	0	0
Office (Two City Center)	**46**	0	0	0	0	0	0	46	0	0
Office (Three City Center)	**30**	0	0	0	0	0	0	0	30	0
Restaurants	**176**	0	88	0	88	0	0	0	0	0
Retail	**87**	0	70	17	0	0	0	0	0	0
Apartments	**246**	0	160	0	0	0	0	0	0	86
Existing Parking Demand	**176**[2]	74	0	34	45	23	0	0	0	0
TOTAL	**3,302**[3]	**479**	**525**	**695**	**455**	**138**	**847**	**46**	**30**	**86**
Garage Capacity	***3,806***	*514*	*552*	*700*	*470*	*445*	*867*	*56*	*106*	*96*
Percent Occupied		**93%**	**95%**	**99%**	**97%**	**31%**	**98%**	**82%**	**28%**	**90%**

1= ULI Shared Parking Demand
2 = Existing parking demand based on the parking counts provided by the APA for a weekday at 7PM
3 = Based on full capacity hockey game with an attendance of 8,500

As shown in **Table 11**, the weekday evening peak parking demand (existing plus proposed) is **3,302** parking spaces versus the parking supply of **3,806** parking spaces provided in the public parking structures. This results in an overall peak parking demand occupancy of approximately **87%**. As seen above, the majority of the garages will be at capacity.

TABLE 12
WEEKDAY (EVENING) PEAK PERIOD DURING SPECIAL "CONCERT TYPE" EVENTS
PROPOSED PARKING DEMAND VS SUPPLY SUMMARY

Land Use	Parking Demand[1]	Existing Parking Authority Parking Garages					Proposed New Parking			
		Walnut Deck	Linden Deck	Spiral Deck	Transportation Center	Government Deck	Arena Deck	Two City Center (Office)	Three City Center (Office)	Four City Center (Apartments)
Arena[3]	**2,843**	398	227	711	370	426	711	0	0	0
LVHN Medical Office Building	**100**	60	0	0	0	0	40	0	0	0
Hotel	**140**	0	0	0	0	0	140	0	0	0
Office (Two City Center)	**46**	0	0	0	0	0	0	46	0	0
Office (Three City Center)	**30**	0	0	0	0	0	0	0	30	0
Restaurants	**176**	0	88	0	88	0	0	0	0	0
Retail	**87**	0	70	17	0	0	0	0	0	0
Apartments	**246**	0	160	0	0	0	0	0	0	86
Existing Parking Demand	**176**[2]	74	0	34	45	23	0	0	0	0
TOTAL	**3,844**[3]	**532**	**545**	**762**	**503**	**449**	**891**	**46**	**30**	**86**
Garage Capacity	***3,806***	*514*	*552*	*700*	*470*	*445*	*867*	*56*	*106*	*96*
Percent Occupied		***104%***	***99%***	***109%***	***107%***	***101%***	***103%***	***82%***	***28%***	***90%***

1= ULI Shared Parking Demand
2 = Existing parking demand based on the parking counts provided by the APA for a weekday 7PM
3 = Based on full capacity concert like event with an attendance of 10,500

As shown in **Table 12**, the weekday evening peak parking demand with a "concert type" event (existing plus proposed) is **3,844** parking spaces versus the parking supply of **3,806** parking spaces provided in the public parking structures. This results in an overall peak parking demand occupancy of approximately **101%**. As seen above, many of the garages will exceed available capacity.

TABLE 13
WEEKEND (MID-MORNING) PEAK PERIOD
PROPOSED PARKING DEMAND VS SUPPLY SUMMARY

Land Use	Parking Demand[1]	Existing Parking Authority Parking Garages					Proposed New Parking			
		Walnut Deck	Linden Deck	Spiral Deck	Transportation Center	Government Deck	Arena Deck	Two City Center (Office)	Three City Center (Office)	Four City Center (Apartments)
Arena	**69**	0	0	0	0	0	69	0	0	0
LVHN Medical Office Building	**666**	100	0	0	0	0	566	0	0	0
Hotel	**143**	0	0	0	0	0	143	0	0	0
Office (Two City Center)	**72**	9	43	0	14	0	0	6	0	0
Office (Three City Center)	**45**	0	0	0	14	23	0	0	9	0
Restaurants	**78**	0	0	78	0	0	0	0	0	0
Retail	**87**	0	44	44	0	0	0	0	0	0
Apartments	**164**	0	82	0	0	0	0	0	0	82
Existing Parking Demand	**142**[2]	85	0	25	7	25	0	0	0	0
TOTAL	**1,466**	**194**	**169**	**147**	**35**	**48**	**778**	**6**	**9**	**82**
Garage Capacity	***3,806***	*514*	*552*	*700*	*470*	*445*	*867*	*56*	*106*	*96*
Percent Occupied		*38%*	*31%*	*21%*	*7%*	*11%*	*90%*	*11%*	*8%*	*85%*

1= ULI Shared Parking Demand
2 = Existing parking demand based on the parking counts provided by the APA for weekend at 9AM

As shown in **Table 13**, the weekend mid-morning peak parking demand (existing plus proposed) is **<u>1,466</u>** parking spaces versus the parking supply of **<u>3,806</u>** parking spaces provided in the public parking structures. This results in an overall peak parking demand occupancy of approximately **<u>39%</u>**.

TABLE 14
WEEKEND (MID-AFTERNOON) PEAK PERIOD
PROPOSED PARKING DEMAND VS SUPPLY SUMMARY

Land Use	Parking Demand[1]	Existing Parking Authority Parking Garages					Proposed New Parking			
		Walnut Deck	Linden Deck	Spiral Deck	Transportation Center	Government Deck	Arena Deck	Two City Center (Office)	Three City Center (Office)	Four City Center (Apartments)
Arena	**2,416**	362	314	483	435	121	701	0	0	0
LVHN Medical Office Building	**0**	0	0	0	0	0	0	0	0	0
Hotel	**143**	0	0	0	0	0	143	0	0	0
Office (Two City Center)	**43**	5	26	0	9	0	0	3	0	0
Office (Three City Center)	**27**	0	0	0	8	14	0	0	5	0
Restaurants	**112**	0	0	112	0	0	0	0	0	0
Retail	**117**	0	59	59	0	0	0	0	0	0
Apartments	**164**	0	82	0	0	0	0	0	0	82
Existing Parking Demand	**118**[2]	50	0	34	15	19	0	0	0	0
TOTAL	**3,140**	**417**	**481**	**688**	**467**	**154**	**844**	**3**	**5**	**82**
Garage Capacity	***3,806***	*514*	*552*	*700*	*470*	*445*	*867*	*56*	*106*	*96*
Percent Occupied		***81%***	***87%***	***98%***	***99%***	***35%***	***97%***	***5%***	***5%***	***85%***

1= ULI Shared Parking Demand
2 = Existing parking demand based on the parking counts provided by the APA for a weekend at 12PM (noon)

As shown in **Table 14**, the weekend mid-afternoon peak parking demand (existing plus proposed) is **3,140** parking spaces versus the parking supply of **3,806** parking spaces provided in the public parking structures. This results in an overall peak parking demand occupancy of approximately **83%**.

TABLE 15
WEEKEND (EVENING) PEAK PERIOD
PROPOSED PARKING DEMAND VS SUPPLY SUMMARY

Land Use	Parking Demand[1]	Existing Parking Authority Parking Garages					Proposed New Parking			
		Walnut Deck	Linden Deck	Spiral Deck	Transportation Center	Government Deck	Arena Deck	Two City Center (Office)	Three City Center (Office)	Four City Center (Apartments)
Arena[3]	**2,531**	456	228	633	304	202	709	0	0	0
LVHN Medical Office Building	**0**	0	0	0	0	0	0	0	0	0
Hotel	**162**	0	0	0	0	0	162	0	0	0
Office (Two City Center)	**0**	0	0	0	0	0	0	0	0	0
Office (Three City Center)	**0**	0	0	0	0	0	0	0	0	0
Restaurants	**195**	0	98	0	98	0	0	0	0	0
Retail	**80**	0	64	16	0	0	0	0	0	0
Apartments	**246**	0	160	0	0	0	0	0	0	86
Existing Parking Demand	**161**[2]	54	0	32	59	13	0	0	0	0
TOTAL	**3,375**[3]	**510**	**550**	**681**	**461**	**218**	**871**	**0**	**0**	**86**
Garage Capacity	***3,806***	*514*	*552*	*700*	*470*	*445*	*867*	*56*	*106*	*96*
Percent Occupied		***99%***	***100%***	***97%***	***98%***	***49%***	***100%***	***0%***	***0%***	***90%***

1= ULI Shared Parking Demand
2 = Existing parking demand based on the parking counts provided by the APA for a weekend at 7PM
3 = Based on full capacity hockey game with an attendance of 8,500

As shown in **Table 15**, the weekend evening peak parking demand (existing plus proposed) is **3,375** parking spaces versus the parking supply of **3,806** parking spaces provided in the public parking structures. This results in an overall peak parking demand occupancy of approximately **89%**. As can be seen, many of the facilities will be at capacity.

TABLE 16
WEEKEND (EVENING) PEAK PERIOD DURING SPECIAL "CONCERT TYPE" EVENTS
PROPOSED PARKING DEMAND VS SUPPLY SUMMARY

Land Use	Parking Demand[1]	Existing Parking Authority Parking Garages					Proposed New Parking			
		Walnut Deck	Linden Deck	Spiral Deck	Transportation Center	Government Deck	Arena Deck	Two City Center (Office)	Three City Center (Office)	Four City Center (Apartments)
Arena[3]	**3,127**	500	313	719	344	469	782	0	0	0
LVHN Medical Office Building	**0**	0	0	0	0	0	0	0	0	0
Hotel	**162**	0	0	0	0	0	162	0	0	0
Office (Two City Center)	**0**	0	0	0	0	0	0	0	0	0
Office (Three City Center)	**0**	0	0	0	0	0	0	0	0	0
Restaurants	**195**	0	98	0	98	0	0	0	0	0
Retail	**80**	0	64	16	0	0	0	0	0	0
Apartments	**246**	0	160	0	0	0	0	0	0	86
Existing Parking Demand	**161**[2]	54	0	32	59	16	0	0	0	0
TOTAL	**3,971**[3]	**554**	**635**	**767**	**501**	**485**	**944**	**0**	**0**	**86**
Garage Capacity	***3,806***	*514*	*552*	*700*	*470*	*445*	*867*	*56*	*106*	*96*
Percent Occupied		***108%***	***115%***	***110%***	***107%***	***109%***	***109%***	***0%***	***0%***	***90%***

1= ULI Shared Parking Demand
2 = Existing parking demand based on the parking counts provided by the APA for a weekend 7PM
3 = Based on full capacity concert like event with an attendance of 10,500

As shown in **Table 16**, the weekend evening peak parking demand with a "concert type" event (existing plus proposed) is **3,971** parking spaces versus the parking supply of **3,806** parking spaces. This results in an overall peak parking demand occupancy of approximately **104%**. As seen above, many of the garages will exceed available capacity.

Weekday Peak Parking Demand

On a typical weekday, the downtown peak parking demand is predominantly generated by the existing and proposed office space during the mid-morning and mid-afternoon peak periods. During the evening peak period, the peak parking demand is driven by the proposed arena.

As shown in **Tables 9-11**, all existing public parking garages and the proposed arena parking garage will be between 86% and 100% occupied for all three (3) peak parking periods. As previously noted, the industry standard which is generally considered full is 85% occupancy.

For the weekday evening peak parking demand during a special "concert type" event, as shown in **Table 12,** all existing public parking garages and the proposed arena parking garage will be at full capacity. Additional parking, at a minimum of approximately 38 parking spaces will be needed elsewhere.

Weekend Peak Parking Demand

On a typical weekend the projected daytime peak parking demand is lower than a weekday due to minimal parking demand from the office buildings. As shown in **Table 13**, the projected occupancy of the public parking garages during the weekend mid-morning peak period is 38%.

As shown in **Tables 14 and 15**, during arena events the occupancy of the public parking garages is projected to range from 35% to 100% for both the mid-afternoon and evening peak parking period. As shown in **Table 16**, during a special "concert type" event all parking garages will have an occupancy rate greater than 100% and additional parking will be required.

POTENTIAL OVERFLOW PARKING

To supplement the public parking garages, there are a number of potential overflow parking locations. With proper planning these locations may accommodate the excess parking demand from the public parking garages.

Existing Public Surface Lots

The Allentown Parking Authority (APA) operates thirteen surface lots within the study area, consisting of approximately 1,069 public parking spaces. Although occupancy data is not immediately available for the surface lots, it is likely that the occupancy rates are similar to the APA parking garages, where 40 percent of spaces are available on weekdays and 90 percent of spaces are available on weekends. Commercial/office users may wish to coordinate with the APA to determine if parking spaces in the public surface lots may be available for lease. In particular, the following surface lots are located in close proximity to the proposed development: the Community Lot, Farr Lot, State Lot, North Lot, and Germania Lot.

Privately Owned Parking Facilities

There are approximately 3,462 existing private parking spaces within the study area, consisting of approximately 1,581 private parking deck spaces and 1,881 private surface lot spaces. TPD does not currently anticipate that the owners of the parking garages will make the garages available to accommodate the parking demand of the proposed development. However, it is possible that the owners of the surface lots will pursue opportunities for contract or event parking. Some of the lots already advertise that contract parking is available and some lots may be underutilized during the evening/event peak hours of parking demand.

On-Street Parking

In addition to these private parking spaces, there are over 1,500 on-street parking spaces within the study area limits. The majority of these spaces are metered, and parking meters are enforced Monday through Saturday from 8:00 A.M. to 6:00 P.M. TPD does not anticipate that people working downtown will utilize the metered spaces. However, they may accommodate retail and restaurant customers during business hours. On arena event nights some event attendees may choose to utilize the spaces closest to the arena. Because the spaces are free after 6:00 P.M., some attendees may circle the study area in search of available on-street spaces and cause needless traffic congestion. Therefore, the City should monitor the usage of the on-street spaces during events to determine if meter hours should be extended.

RECOMMENDATIONS

Based upon this Parking Analysis, Traffic Planning and Design Inc. (TPD) offers the following recommendations:

- As a standard practice with the construction of stadiums, arenas etc., it is necessary to establish an Event Management Plan. A detailed event management plan should be implemented for events at the proposed arena. Event staff may utilize traffic cones, auxiliary signage, and flagging to efficiently guide traffic to event parking. Provide detailed arrival and departure traffic flow maps for the major public parking facilities in the downtown area.
- Provide wayfinding signage on all major approach routes. Within the immediate vicinity of the arena, signage should direct motorists directly to the appropriate parking facilities.
- Utilize a parking guidance and information system for arena events. The system would employ variable message signs to direct motorists to garages with available parking spaces based on real-time occupancy data. TPD recommends that the variable message signs be deployed at key locations where arriving motorists must decide which garage to approach. For example, variable signs may be placed on Seventh Street on the southbound approach to Linden Street, or on Hamilton Street at the eastbound approach of Ninth Street.
- Provide pedestrian oriented wayfinding signage indicating the location of the arena and other downtown attractions at all public parking decks and other key locations throughout the study area.
- The project team should coordinate with the Allentown Parking Authority to examine the existing methods of payment and determine if any improvements can be made to allow for maximum traffic flow into and out of existing parking facilities. An alternative payment system may allow for improved ingress and egress from the garage before and after events.
- The Allentown Parking Authority or arena management team may wish to encourage utilization of the Government Deck during events by offering free/reduced parking rates or establishing shuttle service along Hamilton Street.

- The arena management team should consider overflow parking options for large events. The existing surface lots and on-street parking downtown may be utilized to handle excess parking demand, but advance planning is needed to avoid patron frustration.
- To accommodate peak daytime parking demand, new downtown employers may wish to investigate contract parking at existing public/private surface lots.

CONCLUSIONS

Based on the results of the Parking Analysis, TPD offers the following conclusions:

1. This parking analysis includes the following proposed developments:
   a. At the intersection of 7th Street & Hamilton Street, a new mixed-use complex on the northwest corner will include the following land uses:
      - Multi-use arena;
      - 230,520 s.f. medical office space;
      - 180-room hotel;
      - 8,820 s.f. restaurant;
      - 13,060 s.f. restaurant;
      - Two parking decks with a total of 867 parking spaces.

   b. At the intersection of 7th Street & Hamilton Street, a new office building ("Two City Center") on the northeast corner will include the following land uses:
      - 272,000 s.f. general office space;
      - 8,000 s.f. restaurant;
      - 20,000 s.f. retail space;
      - 56 below grade parking spaces.

   c. At the intersection of Hamilton Street and Law Street, a new office building ("Three City Center") on the northeast corner will include the following land uses:
      - 175,000 s.f. office space;
      - 106 below grade parking spaces.

   d. At the intersection of 7th Street & Linden Street, a new mixed-use complex ("Four City Center") on the southeast corner will include the following land uses:
      - 168 apartments;
      - 37,500 s.f. first floor retail space;
      - 96 below grade parking spaces.

2. It is anticipated that all development outlined above will be completed in 2014. The proposed arena will accommodate minor league hockey games, concerts and other events. The arena capacity for a hockey game will be 8,500 attendees and the capacity for concerts and other events will be 10,500 attendees.

3. In association with the proposed development, the Allentown Parking Authority's Linden Deck will be expanded to include an additional 225 parking spaces. The deck is located on the southeast corner of Linden Street & Church Street.

4. The proposed study area is bound by North Tenth Street to the west, North Fourth Street to the east, Chew Street to the north and Union Street to the South. All existing parking inventories were counted within these boundaries.

5. The Allentown Parking Authority owns and operates five public parking garages in the study area: the Spiral Deck, Walnut Deck, Linden Deck, Government Deck, and Transportation Center. The Linden Deck is currently closed for renovations. The remaining garages include a total of 2,129 parking spaces.

6. Based on parking counts supplied to TPD by the Allentown Parking Authority (APA), it was determined that the existing <u>weekday</u> utilization rates of the public parking garages is as follows: <u>55%</u> at 9:00 AM, <u>56%</u> at 12:00 PM, <u>16%</u> at 5:00 PM and <u>8%</u> at 7:00 PM.

7. Based on parking counts supplied to TPD by the Allentown Parking Authority (APA), it was determined that the existing <u>weekend</u> utilization rates of the public parking garages is as follows: <u>7%</u> at 9:00 AM, <u>6%</u> at 12:00 PM, <u>8%</u> at 5:00 PM and <u>8%</u> at 7:00 PM.

8. It is TPD's understanding that the following additional parking facilities are being constructed in conjunction with the proposed development:
   - The proposed arena complex will include two parking garages: a 742-space above ground garage and a 125-space below ground garage.
   - Two City Center will include 56 on-site parking spaces.
   - Three City Center will include 106 on-site parking spaces.
   - Four City Center will include 96 on-site parking spaces.
   - The Linden Deck, which is owned and operated by the Allentown Parking Authority, is being expanded from 327 parking spaces to 552 parking spaces.

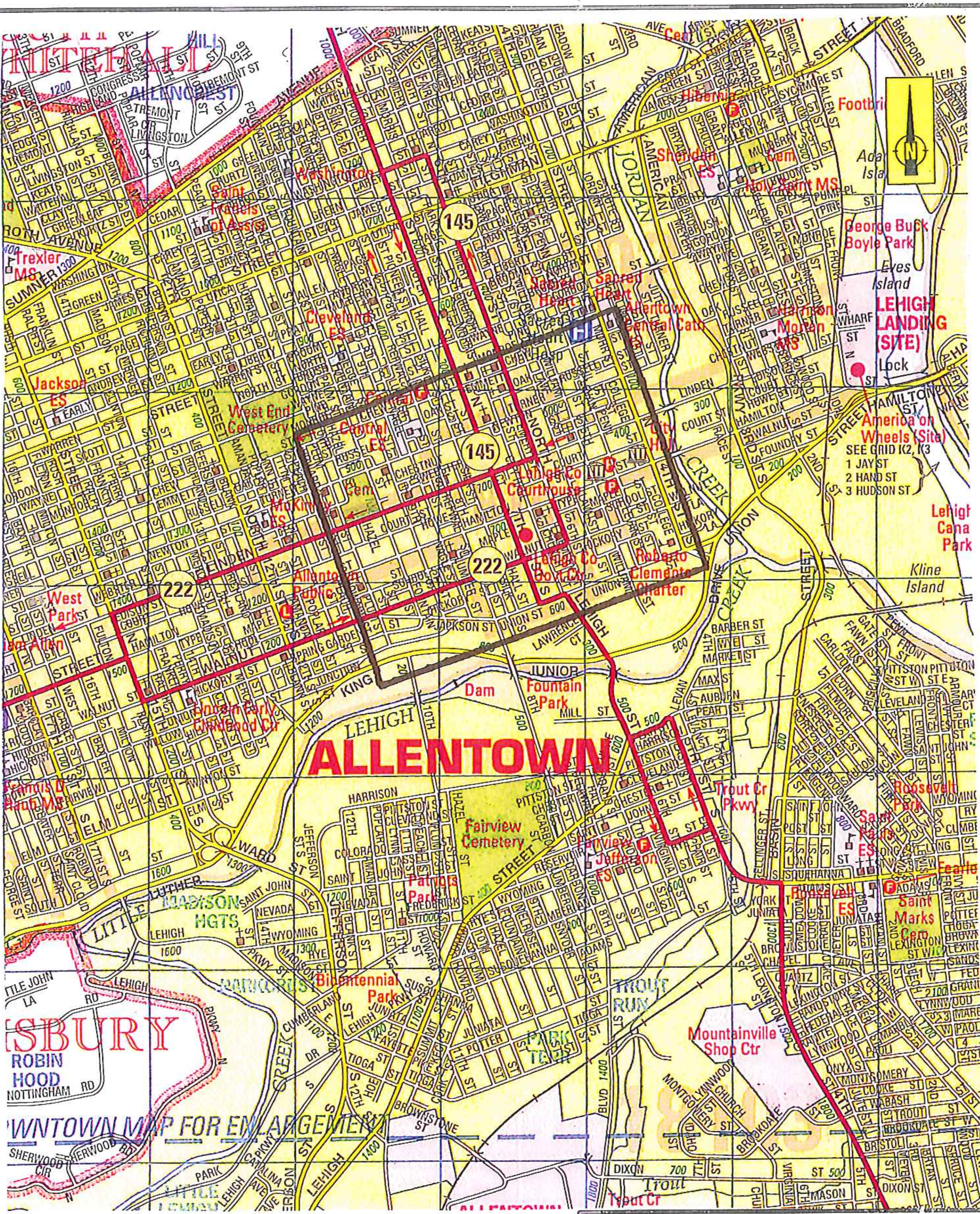
9. A parking facility will be perceived as full at somewhat less than its actual capacity. The industry standard which is generally considered full is 85%. The cushion of spaces reduces the need to search the entire system for the last few parking spaces, thus reducing patron frustration. Parking garages operating above this capacity may lead to patron frustration and a perception of limited parking availability downtown.

10. Upon full build-out of the arena and City Center development, all public parking garages will operate at full capacity on a typical weekday during working hours. During the mid-afternoon and mid-morning peak periods of parking demand, all public parking garages will have an occupancy rate of greater than 85 percent.

11. For hockey games and other arena events with approximately 8,500 attendees, all public parking garages are projected to operate at full capacity with the exception of the Government Deck.

12. For "concert-type events" with 10,500 attendees, all public parking garages are projected to be over capacity. Other on-street and off-street parking facilities will be needed to accommodate the parking demand.

FIGURE 1



TRAFFIC PLANNING AND DESIGN, INC.

PITTSBURGH (412)765-3717
POTTSTOWN (610)326-3100
HARRISBURG (717)234-1430
LEHIGH VALLEY (610)625-4242
SOUTH JERSEY (856)966-4242
WWW.TRAFFICPD.COM

FIGURE 1

STUDY AREA

EXHIBITS

APPENDIX A

DETAILED PARKING INVENTORY SUMMARY

Public & Private Garage & Surface Lot parking Inventories

Destination Lot	Type (Deck, Surface)	Name of LOT	Public/Private	# of Parking Spaces	$ Rate $	Closest Intersection	Special Notes
A	**Garage Deck**	The Spiral Deck	Public	**700**	$1/hour-$8/day Maximum/contract parking	Linden Street (between 8th & 9th)	Attendant MON-FRI 7-8PM/Free After 5:00 PM & Weekends
B	**Garage Deck**	Linden Deck (under construction)*	Public	**0**	552 parking spaces proposed (under constuction)	Linden Street (between 6th & 7th)	Under construction for a total lease/no attendant
C	**Garage Deck**	Walnut Deck	Public	**514**	$1/hour-$8/day Maximum/contract parking	9th Street & Walnut Street	Attendant on Duty 24/7/365
D	**Garage Deck**	Government Deck	Public	**445**	$1/hour-$8/day Maximum/contract parking	4th Street & Hamilton Street	Self- Park Facility, Fully Automated/no attendant (24/7/365)
E	**Garage Deck**	Transportation Center Deck	Public	**470**	$1/hour-$8/day Maximum (Open 24hrs)/contract parking	6th & Linden Street	Self- Park Facility, Fully Automated/no attendant (24/7/365)
F	Surface Lot	"D" Lot	Public	**40**	Contract parking Only- $65 Monthly	10th Street & Hamilton Street	Self-Park
G	Surface Lot	Community (Lower/Middle/Upper)	Public	**222**	$1/hour- $6/day Maximum/contract parking	6th Street (between Walnut & Hamilton)	Attendant- Community Lot/ Self Park- Lower Community Lot
H	Surface Lot	State Lot	Public	**64**	$1/hour - $6/day Maximum- $65 Monthly	6th Street & Linden Street	Self-Park
I	Surface Lot	Alliance Hall Lot	Public	**45**	Permit/ Visitors Only	6th Street & Chew Street	Self-Park
J	Surface Lot	N. Penn Lot	Public	**11**	Permit/Contract Parking	5th Street & Penn Street	Self-Park
K	Surface Lot	5th & Walnut Parking Lot	Private	**91**	Permit Only/ $40 Monthly	5th Street & Walnut Street	Self-Park
L	Surface Lot	Northeast Lot	Public	**39**	$1/hour - $6/day Maximum- $55 Monthly	7th Street & Bus Terminal Road	Self-Park
M	Surface Lot	North Lot	Public	**110**	Contract parking Only/ $60 Monthly	7th Street & Linden Street	Self-Park
N	Surface Lot	Germania Lot	Public	**125**	$1/hour - $6/day Maximum- $52 Monthly	7th Street & Walnut Street	Self-Park
O	Surface Lot	Fountain Lot	Public	**115**	$.25/15 min to $6/day /contract parking	9th Street & S. Fountain Street	Self- Park
P	Surface Lot	Farr Lot	Public	**112**	$1/hour - $6/day Maximum- $65 Monthly	8th Street (between Hamilton & Linden)	Self- Park
Q	Surface Lot	Farr Lofts Lot	n/a	**0**	**Lot has closed**		
R	Surface Lot	Cata Lot	Public	**50**	$1/hour - $6/day Maximum- $55 Monthly	7th Street & Turner Street	Self- Park
S	Surface Lot	"E" Lot	Public	**45**	Permit Parking	9th Street & Chew Street	Self- Park
T	**Garage Deck**	Chew Street Parking Deck	Private	595	1st 30min Free/ $1/hr, 5hrs-24hrs=$6	Chew Street (between 4th & 5th Street)	Attendant on Duty
U	**Garage Deck**	PPL Parking Deck	Private	436	No Public Parking	10th Street & Linden Street	--
V	**Garage Deck**	*Morning Call Parking Deck	Private	250	Morning Call Employees	6th Street & Turner Street	--
W	**Garage Deck**	*Lehigh County Employee GARAGE	Private	300	Employee Parking Only	Walnut Street (between 6th & 7th)	Self-Park
X	Surface Lot	Mid-City Park & Shop Lot	Private	164	$1/hour - $5/day Maximum- Contract	7th Street & Walnut Street	Attendant
Y	Surface Lot	Lehigh County Employee Only	Private	165	Employee Parking Only	4th Street & Turner Street	Self- Park
Z	Surface Lot	Social Security Lot/Other Business	Private	146	Permit & Social Sec. Office Visitors	4th Street & Hamilton Street	Self- Park
AA	Surface Lot	Butz Office Lot	Private	27	Employee Only	9th Street & Walnut Street	Self- Park
BB	Surface Lot	Private Parking (Permit Only)	Private	20	-	6th Street (between Hamilton & Linden)	Self-Park
CC	Surface Lot	New Betham Pre-School Lot	Private	20	-	6th Street & Chew Street	Self-Park
DD	Surface Lot	Union Baptist Church Lot	Private	30	Permit Only	6th Street & Chew Street	Self-Park
EE	Surface Lot	Lehigh County Employee Only	Private	78	Employee Parking Only	Linden & Penn Street	Self-Park
FF	Surface Lot	Lehigh County Employee Only	Private	50	Employee Parking Only	Linden & Penn Street	Self-Park
GG	Surface Lot	Scherline Associates (Law Office)	Private	29	Employee Only	Walnut Street (between 5th & 6th)	Self-Park
HH	Surface Lot	Racketball Club Lot	Privite	82	Memebers Only	6th Street & Union Street	Self-Park
II	Surface Lot	Wells Fargo Lot	Private	79	Contract parking Only/ $30 Monthly	7th Street & Linden Street	Self-Park
JJ	Surface Lot	Pay Parking Lot (Old)	Private	75	-	Linden Street & Church Street	Self-Park
KK	Surface Lot	Lehigh County Employee Only	Private	17	Employee Parking Only	Hamilton Street & Church Street	Self-Park
LL	Surface Lot	Lehigh County Employee Only	Private	46	Employee Parking Only	Walnut Street & Church Street	Self-Park
MM	Surface Lot	Private Lot	Private	31	Contract Only	Walnut Street & Church Street	Self-Park
NN	Surface Lot	DPW Employee Only	Private	77	Employee Parking Only	7th Street & Walnut Street	Self-Park
OO	Surface Lot	Crown Tower Only Lot	Private	62	Employee Parking Only	7th Street & Walnut Street	Self-Park
PP	Surface Lot	Lehigh County Employee Only	Private	46	Employee Parking Only	7th Street & Walnut Street	Self-Park
QQ	Surface Lot	Sigal Center Parking Lot	Private	34	Sigal Center Only	Chew Street & Penn Street	Self-Park
RR	Surface Lot	Hamilton Tower Lot	Private	70	-	4th Street & Hamilton Street	Self-Park
SS	Surface Lot	Chancery House Lot	Private	24	-	Walnut Street & Law Street	Self-Park
TT	Surface Lot	Victoria Village Private Lot	Private	36	Permit Parking Only	6th Street (between Union & Walnut)	Self-Park
UU	Surface Lot	Salem USS Church Lot	Private	44	Memebers & Visitors Only	7th Street & Chew Street	Self-Park
VV	---	*7th Street Lot (Arena Location)	Private	0	Arena development is being constructed on this site	7th Street & Hamilton Street	--
WW	Surface Lot	Private Lot	Private	55	Contract Only-Monthly Available	8th Street & Union Street	Self- Park
XX	Surface Lot	Private Lot	Private	25	Contract Only-Monthly Available	8th Street & Union Street	Self- Park
YY	Surface Lot	Private Lot	Private	16	Permit Parking Only	8th Street & Walnut Street	Self- Park
ZZ	Surface Lot	St Paul Luthern Church Lot	Private	33	Members Only	8th Street & Walnut Street	Self- Park
AAA	Surface Lot	Private Lot	Private	30	Permit Parking Only	8th Street & Maple Street	Self- Park
BBB	Surface Lot	Alliance For Building Community Lot	Private	28	Employee Only	8th Street (between Turner & Chew)	Self- Park
CCC	Surface Lot	ASD Parking Only	Private	75	-	8th Street (between Turner & Chew)	Self- Park
DDD	Surface Lot	Private Lot	Private	83	Permit Parking Only	9th Street & Turner Street	Self- Park
EEE	Surface Lot	Comer Lot- Private	Private	25	-	9th Street & Walnut Street	Self- Park
FFF	Surface Lot	Iglesiade de Dios Church Lot	Private	35	-	10th Street & Chestnut Street	Self- Park
GGG	Surface Lot	Salvation Army Lot	Private	24	Employee/Customer Only	Turner Street & Lumber Street	Self- Park

*** # of parking spaces was estimated**

*** The Linden Deck is currently being reconstructed to add an additional 200+ spaces (Upon Full-Build Out = 552 parking spaces**

	# of Spaces
Public Parking Garage Decks	2129
Public Parking Surface Lots	1069
Private Parking Decks	1581
Private Surface Lots	1881
TOTAL # OF Parking Spaces	**6660**

APPENDIX B

ULI SHARED PARKING DEMAND WORKSHEETS

Project: Downtown Allentown Shared Parking Analysis
Description: 8,500

ksf = thousand square feet

Projected Parking Supply:					Mode Adjustment				Noncaptive Ratio			
			Max Parking Spaces		Weekday		Weekend		Weekday		Weekend	
Land Use	**Quantity**		**Weekday**	**Weekend**	**Daytime**	**Evening**	**Daytime**	**Evening**	**Daytime**	**Evening**	**Daytime**	**Evening**
Community Shopping Center (<400 ksf)	57,500	sf GLA	167	184	95%	95%	95%	95%	75%	75%	75%	75%
Employee			40	46	95%	95%	95%	95%	95%	95%	95%	95%
Regional Shopping Center (400 to 600 ksf)		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Super Regional Shopping Center (>600 ksf)		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Fine/Casual Dining Restaurant	29,880	sf GLA	456	508	95%	95%	95%	95%	25%	25%	25%	25%
Employee			82	90	95%	95%	95%	95%	95%	95%	95%	95%
Family Restaurant		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Fast Food Restaurant		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Nightclub		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Cineplex		seats	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Performing Arts Theater		seats	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Arena	8,500	seats	2295	2550	95%	95%	95%	95%	95%	95%	95%	95%
Employee			255	255	95%	95%	95%	95%	95%	95%	95%	95%
Pro Football Stadium		seats	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Pro Baseball Stadium		seats	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Health Club		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Convention Center		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Hotel-Business		rooms	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Hotel-Leisure	180	rooms	162	180	95%	95%	95%	95%	95%	95%	95%	95%
Restaurant/Lounge		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Conference Ctr/Banquet (20 to 50 sq ft/guest room)		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Convention Space (>50 sq ft/guest room)		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			46	32	95%	95%	95%	95%	95%	95%	95%	95%
Residential, Rental, Shared Spaces	168	units	252	252	95%	95%	95%	95%	95%	95%	95%	95%
Reserved		sp/unit	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Guest	168	units	25	25	95%	95%	95%	95%	95%	95%	95%	95%
Residential, Owned, Shared Spaces		units	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Reserved		sp/unit	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Guest		units	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Office <25 ksf		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Office 25 to 100 ksf		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Office 100 to 500 ksf	447,000	sf GLA	92	10	95%	95%	95%	95%	95%	95%	95%	95%
Employee			1195	120	95%	95%	95%	95%	95%	95%	95%	95%
Office >500 ksf		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Data Processing Office		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Day Care		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Medical/Dental Office (ULI Info)	230,520	sf GLA	242	242	95%	95%	95%	95%	95%	95%	95%	95%
Employee			496	496	95%	95%	95%	95%	95%	95%	95%	95%
Subtotal Customer/Guest Spaces			3439	3699								
Subtotal Employee/Resident Spaces			2366	1291								
Subtotal Reserved Spaces			0	0								
Total Parking Spaces			5805	4990								

Table 12/19/2013

Project: Downtown Allentown Shared Parking Analysi

Description: 8,500

March

Weekday Estimated Peak-Hour Parking Demanc

	Monthly Adj.	0	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM	Overall Pk 8 PM	AM Peak Hr 10 AM	PM Peak Hr 2 PM	Eve Peak Hr 8 PM
Community Shopping Center (<400 ksf)	64%	0%	1	4	11	27	50	65	72	76	72	69	69	72	72	72	61	38	23	8	-	61	50	72	61
Employee	80%	0%	3	4	12	22	25	27	29	29	29	29	29	27	27	27	26	22	12	4	-	26	25	29	26
Fine/Casual Dining Restaurant	95%	0%	-	-	-	-	15	41	77	77	67	41	51	77	97	102	102	102	97	77	26	102	15	67	102
Employee	100%	0%	-	15	37	56	67	67	67	67	67	56	56	74	74	74	74	74	74	63	26	74	67	67	74
Arena	100%	0%	-	-	-	21	21	21	21	21	21	21	21	21	207	518	2,071	2,071	1,761	-	-	2,071	21	21	2,071
Employee	100%	0%	-	23	23	46	46	46	69	69	69	69	69	69	230	230	230	230	69	23	12	230	46	69	230
Hotel-Leisure	100%	0%	139	139	132	117	102	102	95	95	102	102	110	117	124	124	132	139	139	146	146	132	102	102	132
Employee	100%	0%	2	12	37	37	42	42	42	42	42	42	37	29	17	8	8	8	8	4	2	8	42	42	8
Residential, Rental, Shared Spaces	100%	0%	227	205	193	182	171	159	148	159	159	159	171	193	205	221	223	225	227	227	227	223	171	159	223
Guest	100%		-	2	5	5	5	5	5	5	5	5	5	9	14	23	23	23	23	18	11	23	5	5	23
Office 100 to 500 ksf	100%	0%	-	1	17	50	83	37	12	37	83	37	12	8	4	2	1	-	-	-	-	1	83	83	1
Employee	100%	0%	32	324	809	1,025	1,078	1,078	971	971	1,078	1,078	971	539	270	108	75	32	11	-	-	75	1,078	1,078	75
Medical/Dental Office (ULI Info)	100%	0%	-	39	140	183	218	218	192	177	197	203	188	114	138	66	33	-	-	-	-	33	218	197	33
Employee	100%	0%	-	81	286	376	448	448	394	363	403	416	385	233	282	134	67	-	-	-	-	67	448	403	67
TOTAL DEMAND	Customer	0	140	185	305	403	494	489	474	488	547	478	456	418	656	907	2,423	2,373	2,043	249	183	2,423	494	547	2,423
	Employee	0	264	664	1,397	1,744	1,877	1,867	1,720	1,700	1,847	1,849	1,718	1,164	1,105	802	703	591	401	321	267	703	1,877	1,847	703
	Reserved	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0		404	849	1,702	2,147	2,371	2,356	2,194	2,188	2,394	2,327	2,174	1,582	1,761	1,709	3,126	2,964	2,444	570	450	3,126	2,371	2,394	3,126
ULI base data have been modified from default values	0																					3,126	2,371	2,394	3,126

Footnote(s):

March

Weekend Estimated Peak-Hour Parking Demanc

			6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM	Overall Pk 8 PM	AM Peak Hr 11 AM	PM Peak Hr 2 PM	Eve Peak Hr 8 PM
Community Shopping Center (<400 ksf)	64%	0%	1	4	8	25	42	55	67	76	84	84	80	76	67	63	55	42	29	13	-	55	55	84	55
Employee	80%	0%	3	5	13	25	28	32	33	33	33	33	33	32	28	27	25	22	15	5	-	25	32	33	25
Fine/Casual Dining Restaurant	95%	0%	-	-	-	-	-	17	57	63	51	51	51	69	103	108	114	103	103	103	57	114	17	51	114
Employee	100%	0%	-	16	24	49	61	61	61	61	61	61	61	81	81	81	81	81	81	69	41	81	61	61	81
Arena	100%	0%	-	-	-	23	23	23	23	575	2,186	2,186	1,864	23	23	575	2,301	2,301	-	-	-	2,301	23	2,186	2,301
Employee	100%	0%	-	23	23	46	46	46	69	230	230	230	230	69	230	230	230	230	69	23	12	230	46	230	230
Hotel-Leisure	100%	0%	154	154	146	130	114	114	106	106	114	114	122	130	138	138	146	154	154	162	162	146	114	114	146
Employee	100%	0%	1	9	26	26	29	29	29	29	29	29	26	22	17	16	16	16	13	13	9	16	29	29	16
Residential, Rental, Shared Spaces	100%	0%	227	205	193	182	171	159	148	159	159	159	171	193	205	221	223	225	227	227	227	223	159	159	223
Guest	100%		-	5	5	5	5	5	5	5	5	5	5	9	14	23	23	23	23	18	11	23	5	5	23
Office 100 to 500 ksf	100%	0%	-	2	5	7	8	9	8	7	5	4	2	1	-	-	-	-	-	-	-	-	9	5	-
Employee	100%	0%	-	22	65	87	97	108	97	87	65	43	22	11	5	-	-	-	-	-	-	-	108	65	-
Medical/Dental Office (ULI Info)	100%	0%	-	-	197	197	218	218	66	-	-	-	-	-	-	-	-	-	-	-	-	-	218	-	-
Employee	100%	0%	-	-	269	448	448	448	448	-	-	-	-	-	-	-	-	-	-	-	-	-	448	-	-
TOTAL DEMAND	Customer	0	155	165	361	387	410	441	332	832	2,445	2,444	2,124	308	345	907	2,639	2,623	309	296	230	2,639	441	2,445	2,639
	Employee	0	231	280	613	863	880	883	885	599	577	555	543	408	566	575	575	574	405	337	289	575	883	577	575
	Reserved	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			386	445	974	1,250	1,290	1,324	1,217	1,431	3,022	2,999	2,667	716	911	1,482	3,214	3,197	714	633	519	3,214	1,324	3,022	3,214
ULI base data have been modified from default values																						3,214	1,324	3,022	3,214

Table
Project: Downtown Allentown Shared Parking Analysis
Description: 8,500

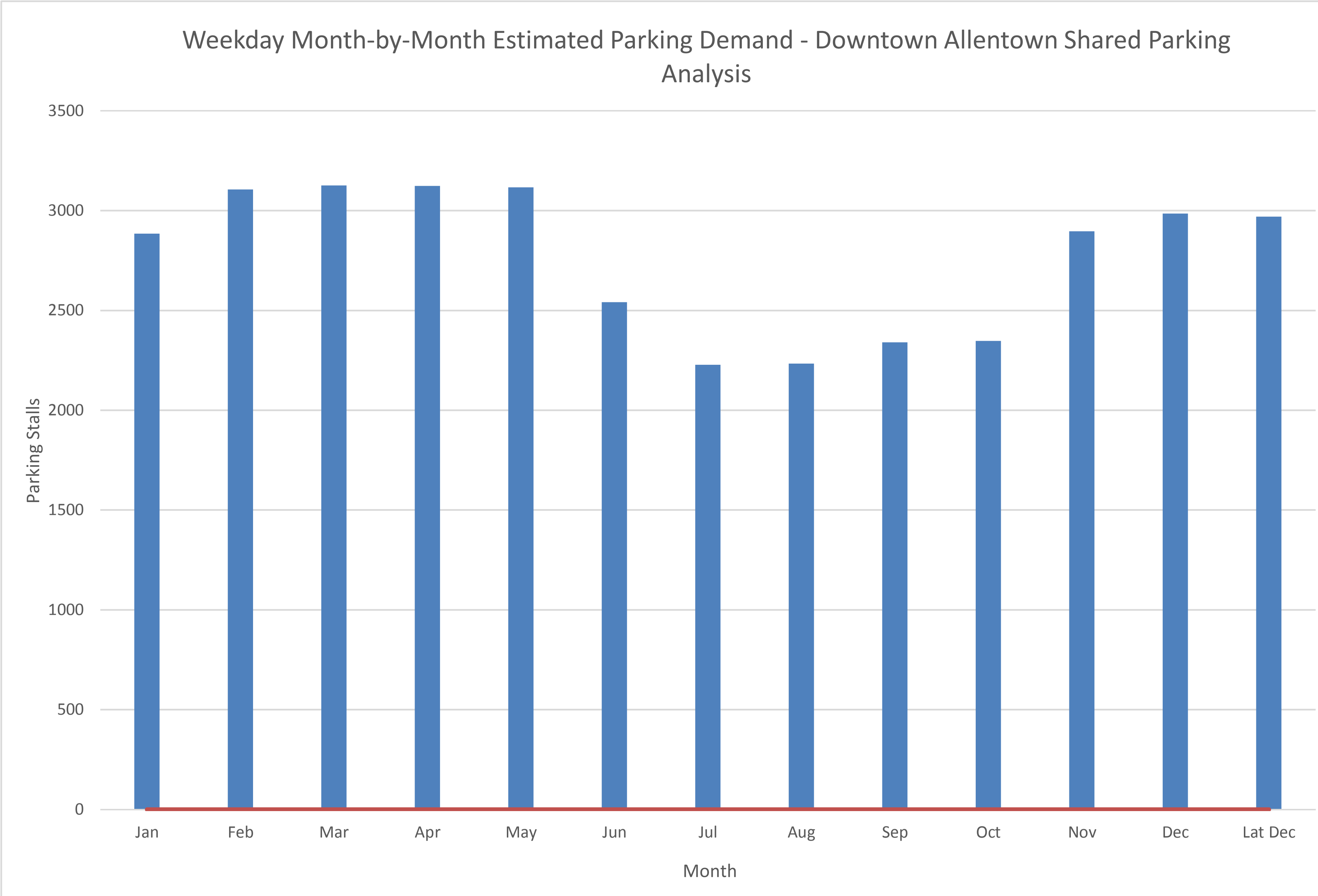
SHARED PARKING DEMAND SUMMARY

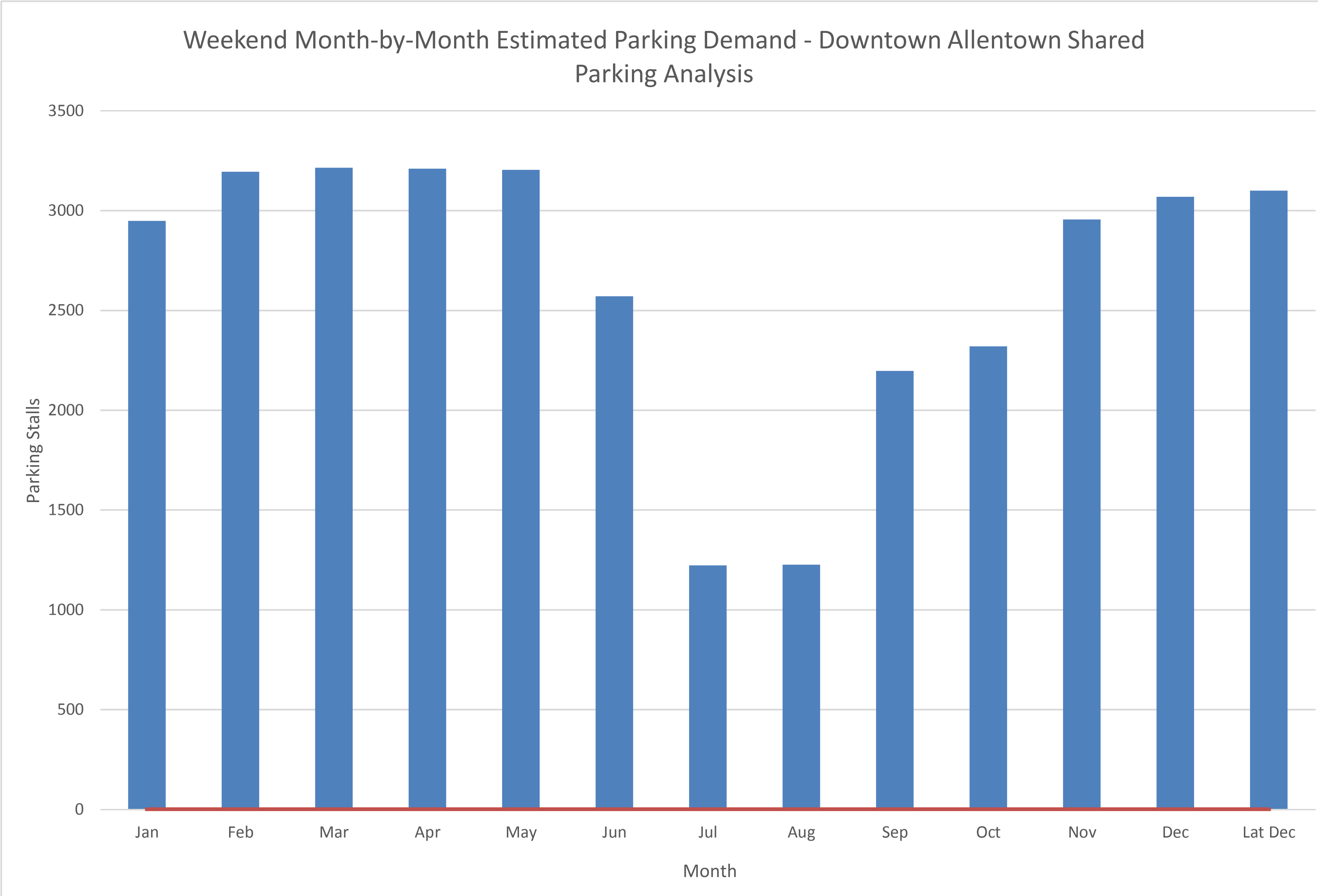
PEAK MONTH: MARCH -- PEAK PERIOD: 8 PM, WEEKEND

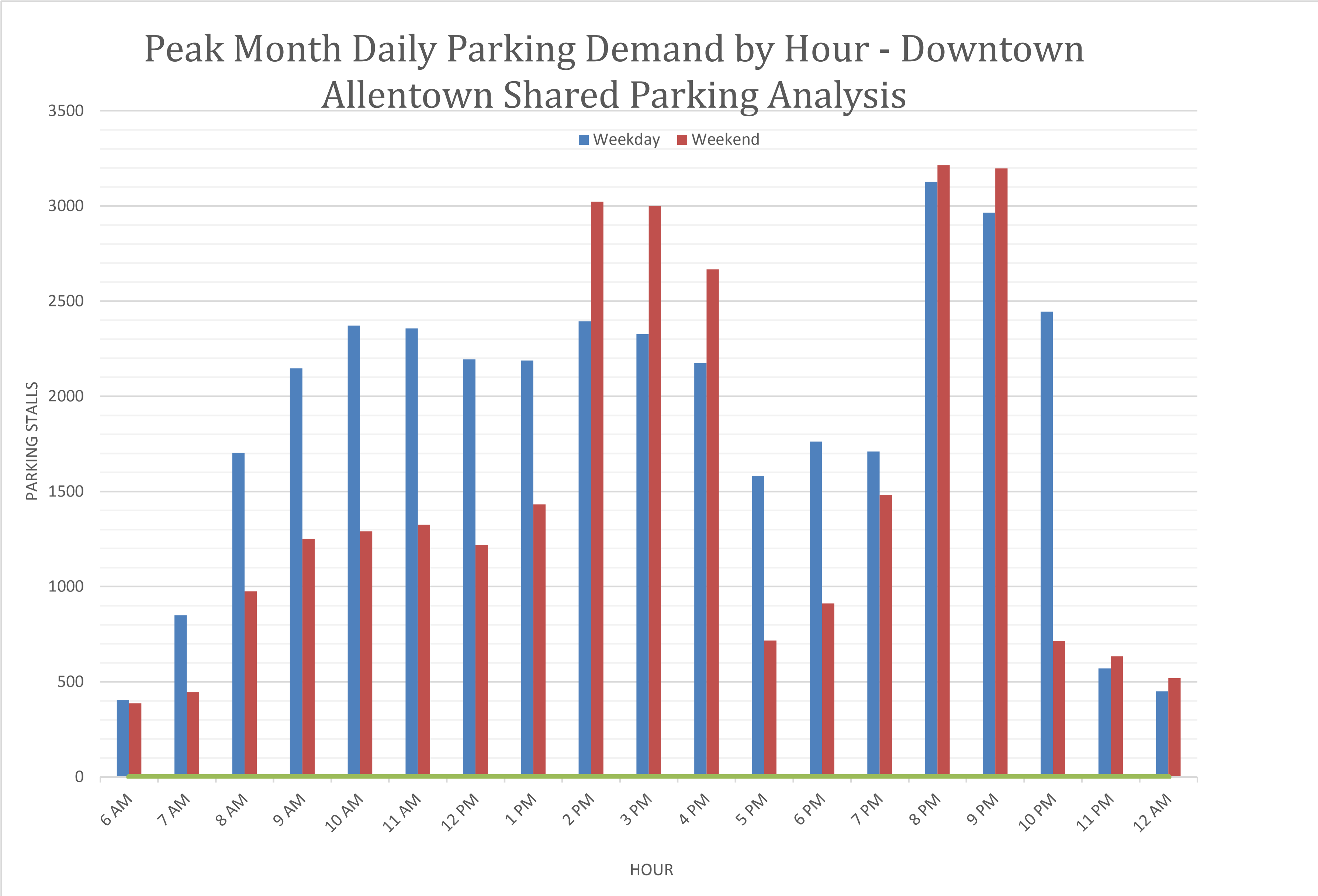
			Weekday					Weekend					Weekday			Weekend		
Land Use	Project Data Quantity	Unit	Base Rate	Mode Adj	Non-Captive Ratio	Project Rate	Unit	Base Rate	Mode Adj	Non-Captive Ratio	Project Rate	Unit	Peak Hr Adj 8 PM	Peak Mo Adj March	Estimated Parking Demand	Peak Hr Adj 8 PM	Peak Mo Adj March	Estimated Parking Demand
Community Shopping Center (<400 ksf)	57,500	sf GLA	2.90	0.95	0.75	2.07	/ksf GLA	3.20	0.95	0.75	2.28	/ksf GLA	0.80	0.64	61	0.65	0.64	55
Employee			0.70	0.95	0.95	0.63	/ksf GLA	0.80	0.95	0.95	0.72	/ksf GLA	0.90	0.80	26	0.75	0.80	25
Fine/Casual Dining Restaurant	29,880	sf GLA	15.25	0.95	0.25	3.62	/ksf GLA	17.00	0.95	0.25	4.04	/ksf GLA	1.00	0.95	102	1.00	0.95	114
Employee			2.75	0.95	0.95	2.48	/ksf GLA	3.00	0.95	0.95	2.71	/ksf GLA	1.00	1.00	74	1.00	1.00	81
Arena	8,500	seats	0.27	0.95	0.95	0.24	/seat	0.30	0.95	0.95	0.27	/seat	1.00	1.00	2,071	1.00	1.00	2,301
Employee			0.03	0.95	0.95	0.03	/seat	0.03	0.95	0.95	0.03	/seat	1.00	1.00	230	1.00	1.00	230
Hotel-Leisure	180	rooms	0.90	0.95	0.95	0.81	/rooms	1.00	0.95	0.95	0.90	/rooms	0.90	1.00	132	0.90	1.00	146
Employee			0.25	0.95	0.95	0.23	/rooms	0.18	0.95	0.95	0.16	/rooms	0.20	1.00	8	0.55	1.00	16
Residential, Rental, Shared Spaces	168	units	1.50	0.95	0.95	1.35	/unit	1.50	0.95	0.95	1.35	/unit	0.98	1.00	223	0.98	1.00	223
Reserved		sp/unit	0	1.00	1.00	0	/unit	0	1.00	1.00	0	/unit	1.00	1.00	0	1.00	1.00	0
Guest	168	units	0	0.95	0.95	0	/unit	0	0.95	0.95	0	/unit	1.00	1.00	23	1.00	1.00	23
Reserved		sp/unit	0.00	1.00	1.00	0.00	/unit	0.00	1.00	1.00	0.00	/unit	1.00	1.00	0	1.00	1.00	0
Guest		units	0.15	1.00	1.00	0.15	/unit	0.15	1.00	1.00	0.00	/unit	1.00	1.00	0	1.00	1.00	0

ULI base data have been modified from default values.

Weekday		Weekend	
Customer	2423	Customer	2639
Employee	703	Employee	575
Reserved	0	Reserved	0
Total	3126	Total	3214
Shared Parking Reduction	49%		48%

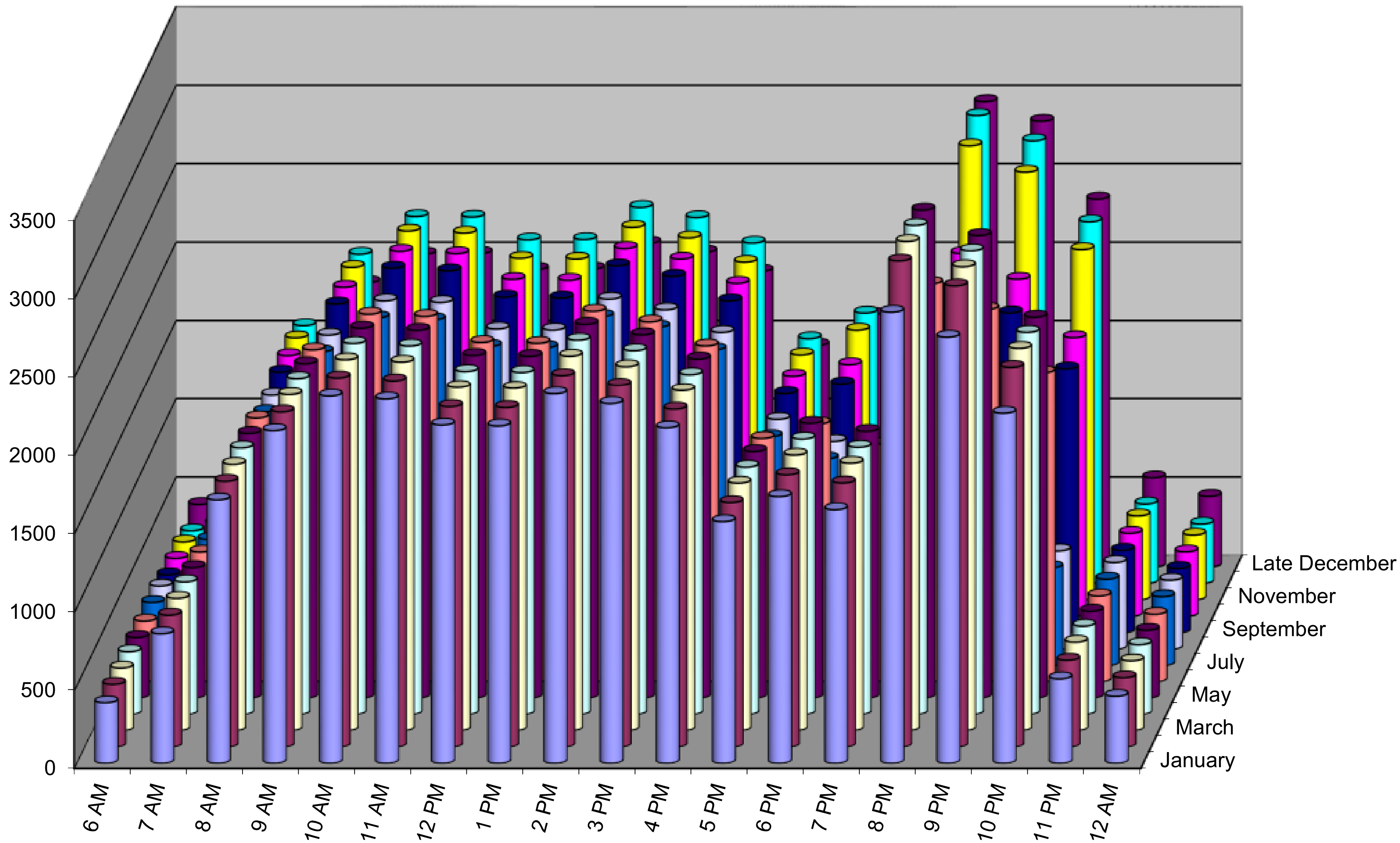

Weekday Month-by-Month Estimated Parking Demand - Downtown Allentown Shared Parking Analysis
Parking Stalls
3500
3000
2500
2000
1500
1000
500
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Lat Dec
Month


Weekend Month-by-Month Estimated Parking Demand - Downtown Allentown Shared Parking Analysis
Parking Stalls
3500
3000
2500
2000
1500
1000
500
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Lat Dec
Month

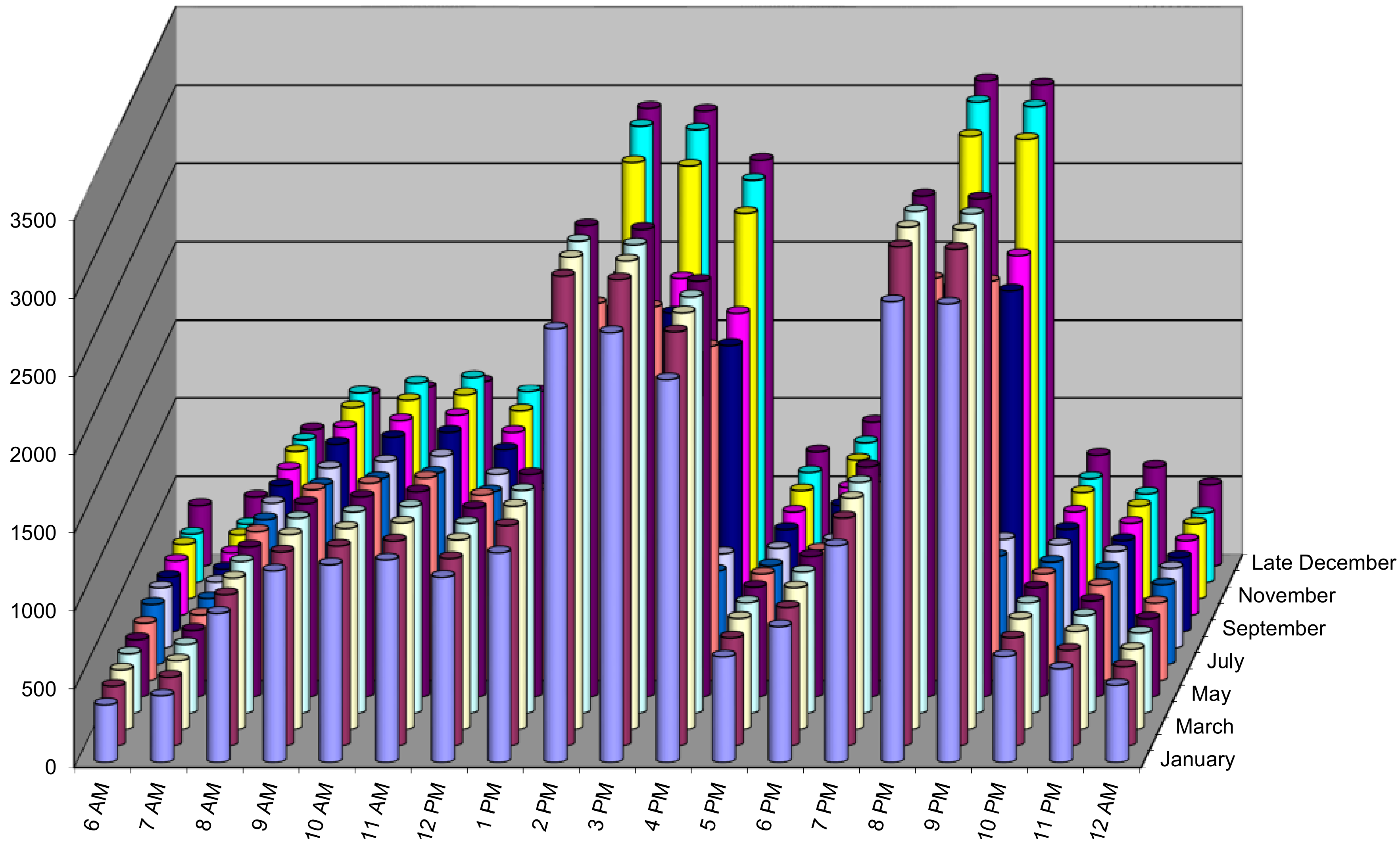


Peak Month Daily Parking Demand by Hour - Downtown Allentown Shared Parking Analysis
Weekday
Weekend
PARKING STALLS
3500
3000
2500
2000
1500
1000
500
0
6 AM
7 AM
8 AM
9 AM
10 AM
11 AM
12 PM
1 PM
2 PM
3 PM
4 PM
5 PM
6 PM
7 PM
8 PM
9 PM
10 PM
11 PM
12 AM
HOUR

Weekday Comparison by Month and by Hour - Downtown Allentown Shared Parking Analysis



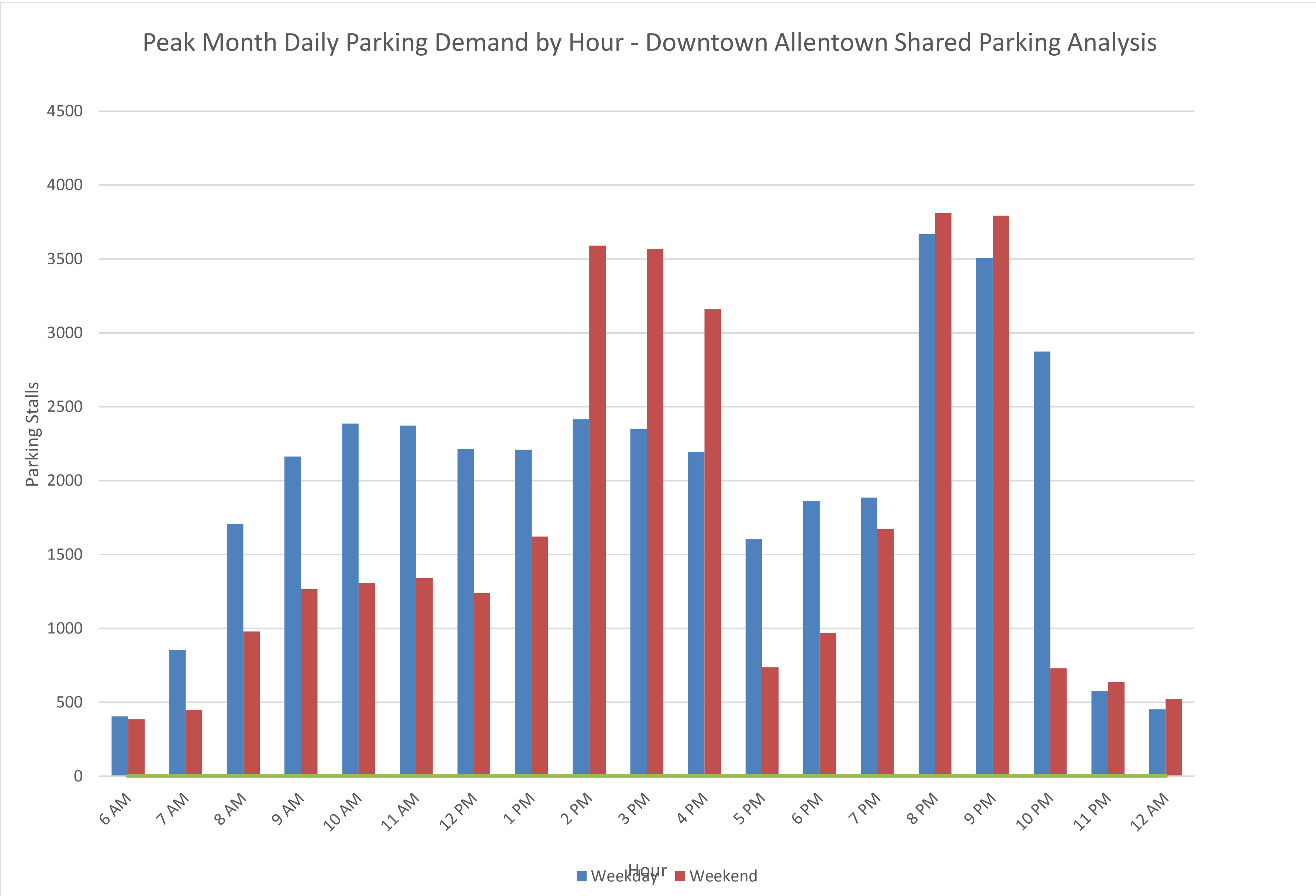
Weekend Comparison by Month and by Hour - Downtown Allentown Shared Parking Analysis



Project: Downtown Allentown Shared Parking Analysis
Description: 10,500

ksf = thousand square feet

Projected Parking Supply:					Mode Adjustment				Noncaptive Ratio			
			Max Parking Spaces		Weekday		Weekend		Weekday		Weekend	
Land Use	**Quantity**		**Weekday**	**Weekend**	**Daytime**	**Evening**	**Daytime**	**Evening**	**Daytime**	**Evening**	**Daytime**	**Evening**
Community Shopping Center (<400 ksf)	57,500	sf GLA	167	184	95%	95%	95%	95%	75%	75%	75%	75%
Employee			40	46	95%	95%	95%	95%	95%	95%	95%	95%
Regional Shopping Center (400 to 600 ksf)		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Super Regional Shopping Center (>600 ksf)		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Fine/Casual Dining Restaurant	29,880	sf GLA	456	508	95%	95%	95%	95%	25%	25%	25%	25%
Employee			82	90	95%	95%	95%	95%	95%	95%	95%	95%
Family Restaurant	0	sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Fast Food Restaurant		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Nightclub		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Cineplex		seats	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Performing Arts Theater		seats	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Arena	10,500	seats	2835	3150	95%	95%	95%	95%	95%	95%	95%	95%
Employee			315	315	95%	95%	95%	95%	95%	95%	95%	95%
Pro Football Stadium		seats	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Pro Baseball Stadium		seats	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Health Club		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Convention Center		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Hotel-Business		rooms	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Hotel-Leisure	180	rooms	162	180	95%	95%	95%	95%	95%	95%	95%	95%
Restaurant/Lounge		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Conference Ctr/Banquet (20 to 50 sq ft/guest room)		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Convention Space (>50 sq ft/guest room)		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			46	32	95%	95%	95%	95%	95%	95%	95%	95%
Residential, Rental, Shared Spaces	168	units	252	252	95%	95%	95%	95%	95%	95%	95%	95%
Reserved		sp/unit	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Guest	168	units	25	25	95%	95%	95%	95%	95%	95%	95%	95%
Residential, Owned, Shared Spaces		units	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Reserved		sp/unit	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Guest		units	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Office <25 ksf		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Office 25 to 100 ksf		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Office 100 to 500 ksf	447,000	sf GLA	92	10	95%	95%	95%	95%	95%	95%	95%	95%
Employee			1195	120	95%	95%	95%	95%	95%	95%	95%	95%
Office >500 ksf		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Data Processing Office		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Day Care		sf GLA	0	0	100%	100%	100%	100%	100%	100%	100%	100%
Employee			0	0	100%	100%	100%	100%	100%	100%	100%	100%
Medical/Dental Office (ULI Info)	230,520	sf GLA	242	242	95%	95%	95%	95%	95%	95%	95%	95%
Employee			496	496	95%	95%	95%	95%	95%	95%	95%	95%
Subtotal Customer/Guest Spaces			3979	4299								
Subtotal Employee/Resident Spaces			2426	1351								
Subtotal Reserved Spaces			0	0								
Total Parking Spaces			6405	5650								



Peak Month Daily Parking Demand by Hour - Downtown Allentown Shared Parking Analysis
Parking Stalls
4500
4000
3500
3000
2500
2000
1500
1000
500
0
6 AM
7 AM
8 AM
9 AM
10 AM
11 AM
12 PM
1 PM
2 PM
3 PM
4 PM
5 PM
6 PM
7 PM
8 PM
9 PM
10 PM
11 PM
12 AM
Hour
Weekday
Weekend

Table 12/19/2013
Project: Downtown Allentown Shared Parking Analysis
Description: 10,500

March
Weekday Estimated Peak-Hour Parking Demand

	Monthly Adj.	0	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM	Overall Pk 8 PM	AM Peak Hr 10 AM	PM Peak Hr 2 PM	Eve Peak Hr 8 PM
Community Shopping Center (<400 ksf)	64%	0%	1	4	11	27	50	65	72	76	72	69	69	72	72	72	61	38	23	8	-	61	50	72	61
Employee	80%	0%	3	4	12	22	25	27	29	29	29	29	29	27	27	27	26	22	12	4	-	26	25	29	26
Fine/Casual Dining Restaurant	95%	0%	-	-	-	-	15	41	77	77	67	41	51	77	97	102	102	102	97	77	26	102	15	67	102
Employee	100%	0%	-	15	37	56	67	67	67	67	67	56	56	74	74	74	74	74	74	63	26	74	67	67	74
Arena	100%	0%	-	-	-	26	26	26	26	26	26	26	26	26	256	640	2,559	2,559	2,175	-	-	2,559	26	26	2,559
Employee	100%	0%	-	28	28	57	57	57	85	85	85	85	85	85	284	284	284	284	85	28	14	284	57	85	284
Hotel-Leisure	100%	0%	139	139	132	117	102	102	95	95	102	102	110	117	124	124	132	139	139	146	146	132	102	102	132
Employee	100%	0%	2	12	37	37	42	42	42	42	42	42	37	29	17	8	8	8	8	4	2	8	42	42	8
Residential, Rental, Shared Spaces	100%	0%	227	205	193	182	171	159	148	159	159	159	171	193	205	221	223	225	227	227	227	223	171	159	223
Guest	100%		-	2	5	5	5	5	5	5	5	5	5	9	14	23	23	23	23	18	11	23	5	5	23
Office 100 to 500 ksf	100%	0%	-	1	17	50	83	37	12	37	83	37	12	8	4	2	1	-	-	-	-	1	83	83	1
Employee	100%	0%	32	324	809	1,025	1,078	1,078	971	971	1,078	1,078	971	539	270	108	75	32	11	-	-	75	1,078	1,078	75
Medical/Dental Office (ULI Info)	100%	0%	-	39	140	183	218	218	192	177	197	203	188	114	138	66	33	-	-	-	-	33	218	197	33
Employee	100%	0%	-	81	286	376	448	448	394	363	403	416	385	233	282	134	67	-	-	-	-	67	448	403	67
TOTAL DEMAND	Customer	0	140	185	305	408	499	494	479	493	552	483	461	423	705	1,029	2,911	2,861	2,457	249	183	2,911	499	552	2,911
	Employee	0	264	669	1,402	1,755	1,888	1,878	1,736	1,716	1,863	1,865	1,734	1,180	1,159	856	757	645	417	326	269	757	1,888	1,863	757
	Reserved	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		0	404	854	1,707	2,163	2,387	2,372	2,215	2,209	2,415	2,348	2,195	1,603	1,864	1,885	3,668	3,506	2,874	575	452	3,668	2,387	2,415	3,668
ULI base data have been modified from default values.		0																				3,668	2,387	2,415	3,668

Footnote(s):

March
Weekend Estimated Peak-Hour Parking Demand

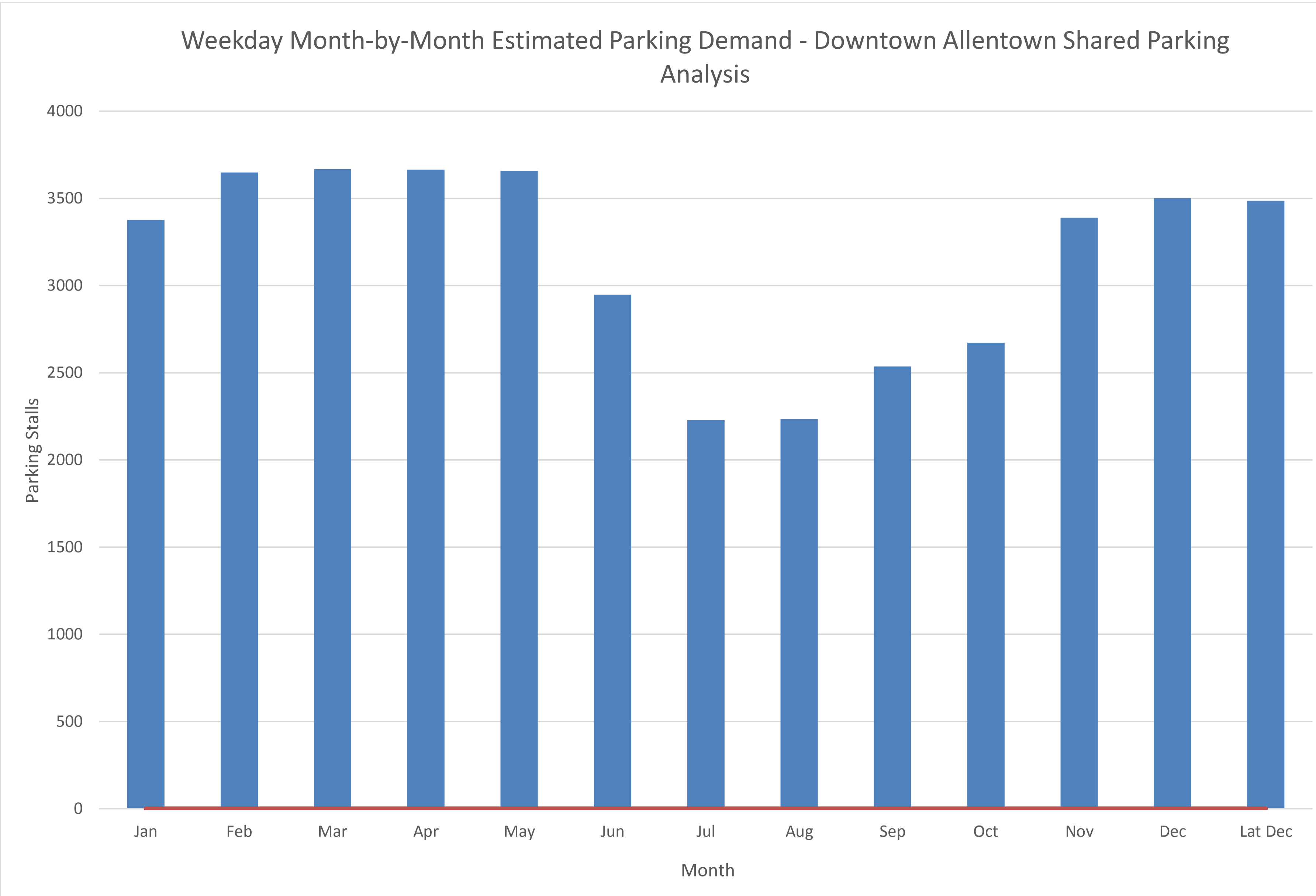
			6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM	Overall Pk 8 PM	AM Peak Hr 11 AM	PM Peak Hr 2 PM	Eve Peak Hr 8 PM
Community Shopping Center (<400 ksf)	64%	0%	1	4	8	25	42	55	67	76	84	84	80	76	67	63	55	42	29	13	-	55	55	84	55
Employee	80%	0%	3	5	13	25	28	32	33	33	33	33	33	32	28	27	25	22	15	5	-	25	32	33	25
Fine/Casual Dining Restaurant	95%	0%	-	-	-	-	-	17	57	63	51	51	51	69	103	108	114	103	103	103	57	114	17	51	114
Employee	100%	0%	-	16	24	49	61	61	61	61	61	61	61	81	81	81	81	81	81	69	41	81	61	61	81
Arena	100%	0%	-	-	-	28	28	28	28	711	2,701	2,701	2,303	28	28	711	2,843	2,843	-	-	-	2,843	28	2,701	2,843
Employee	100%	0%	-	28	28	57	57	57	85	284	284	284	284	85	284	284	284	284	85	28	14	284	57	284	284
Hotel-Leisure	100%	0%	154	154	146	130	114	114	106	106	114	114	122	130	138	138	146	154	154	162	162	146	114	114	146
Employee	100%	0%	1	9	26	26	29	29	29	29	29	29	26	22	17	16	16	16	13	13	9	16	29	29	16
Residential, Rental, Shared Spaces	100%	0%	227	205	193	182	171	159	148	159	159	159	171	193	205	221	223	225	227	227	227	223	159	159	223
Guest	100%		-	5	5	5	5	5	5	5	5	5	5	9	14	23	23	23	23	18	11	23	5	5	23
Office 100 to 500 ksf	100%	0%	-	2	5	7	8	9	8	7	5	4	2	1	-	-	-	-	-	-	-	-	9	5	-
Employee	100%	0%	-	22	65	87	97	108	97	87	65	43	22	11	5	-	-	-	-	-	-	-	108	65	-
Medical/Dental Office (ULI Info)	100%	0%	-	-	197	197	218	218	66	-	-	-	-	-	-	-	-	-	-	-	-	-	218	-	-
Employee	100%	0%	-	-	269	448	448	448	448	-	-	-	-	-	-	-	-	-	-	-	-	-	448	-	-
TOTAL DEMAND	Customer	0	155	165	361	392	415	446	337	968	2,960	2,959	2,563	313	350	1,043	3,181	3,165	309	296	230	3,181	446	2,960	3,181
	Employee	0	231	285	618	874	891	894	901	653	631	609	597	424	620	629	629	628	421	342	291	629	894	631	629
	Reserved	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			386	450	979	1,266	1,306	1,340	1,238	1,621	3,591	3,568	3,160	737	970	1,672	3,810	3,793	730	638	521	3,810	1,340	3,591	3,810
ULI base data have been modified from default values.																						3,810	1,340	3,591	3,810

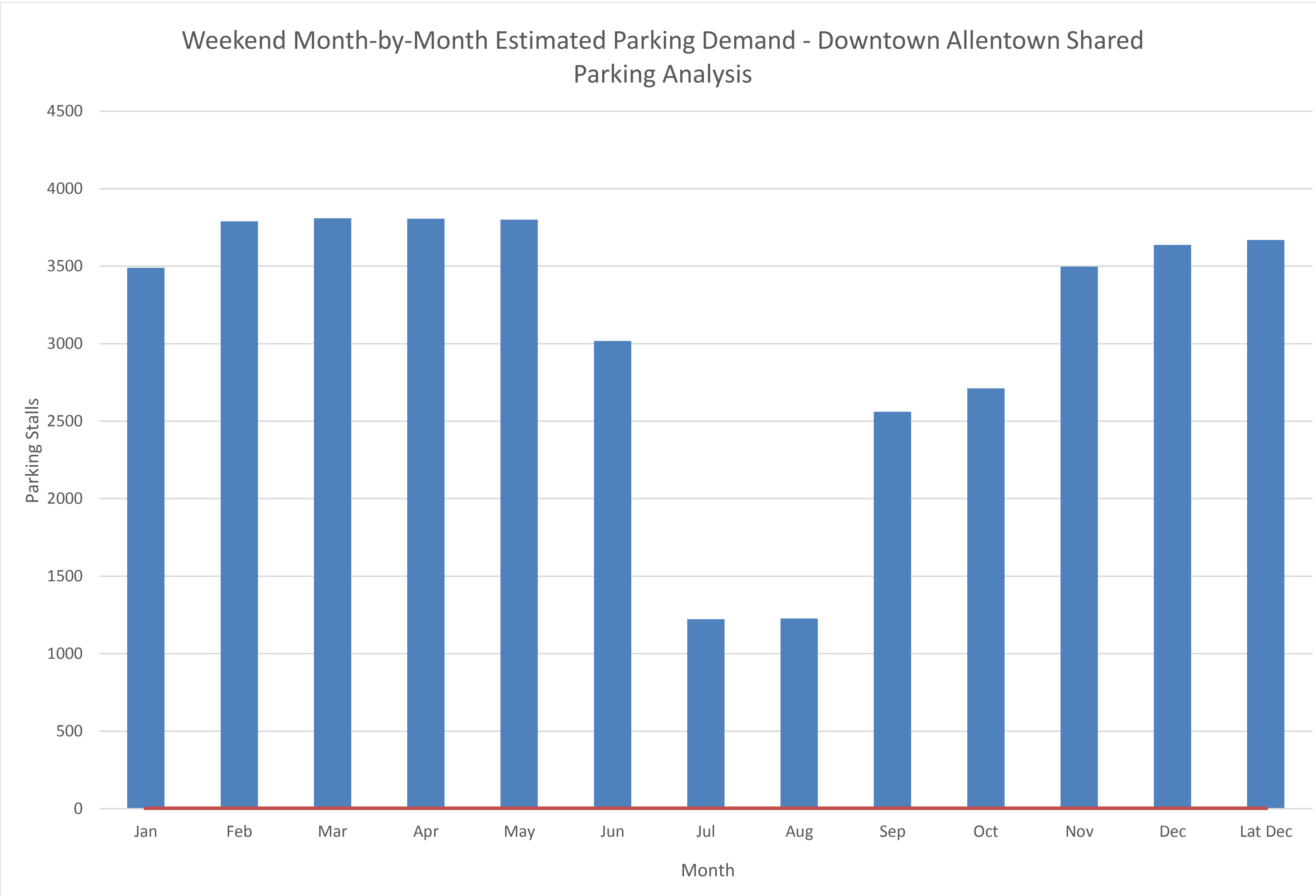
Table
Project: Downtown Allentown Shared Parking Analysis
Description: 10,500

SHARED PARKING DEMAND SUMMARY

PEAK MONTH: MARCH -- PEAK PERIOD: 8 PM, WEEKEND

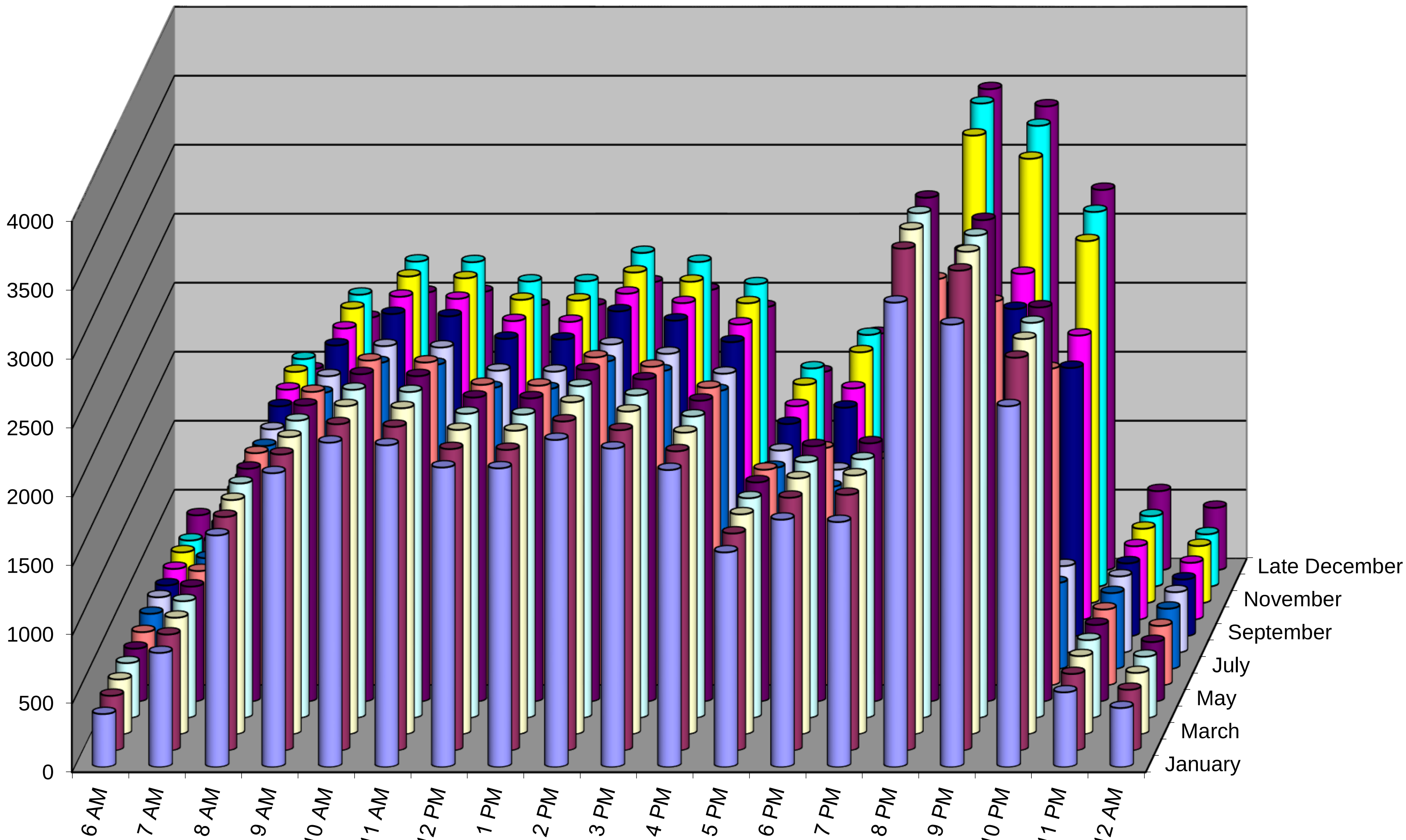
	Project Data		Weekday					Weekend					Weekday			Weekend		
Land Use	**Quantity**	**Unit**	**Base Rate**	**Mode Adj**	**Non-Captive Ratio**	**Project Rate**	**Unit**	**Base Rate**	**Mode Adj**	**Non-Captive Ratio**	**Project Rate**	**Unit**	**Peak Hr Adj 8 PM**	**Peak Mo Adj March**	**Estimated Parking Demand**	**Peak Hr Adj 8 PM**	**Peak Mo Adj March**	**Estimated Parking Demand**
Community Shopping Center (<400 ksf)	57,500	sf GLA	2.90	0.95	0.75	2.07	/ksf GLA	3.20	0.95	0.75	2.28	/ksf GLA	0.80	0.64	61	0.65	0.64	55
Employee			0.70	0.95	0.95	0.63	/ksf GLA	0.80	0.95	0.95	0.72	/ksf GLA	0.90	0.80	26	0.75	0.80	25
Fine/Casual Dining Restaurant	29,880	sf GLA	15.25	0.95	0.25	3.62	/ksf GLA	17.00	0.95	0.25	4.04	/ksf GLA	1.00	0.95	102	1.00	0.95	114
Employee			2.75	0.95	0.95	2.48	/ksf GLA	3.00	0.95	0.95	2.71	/ksf GLA	1.00	1.00	74	1.00	1.00	81
Arena	10,500	seats	0.27	0.95	0.95	0.24	/seat	0.30	0.95	0.95	0.27	/seat	1.00	1.00	2,559	1.00	1.00	2,843
Employee			0.03	0.95	0.95	0.03	/seat	0.03	0.95	0.95	0.03	/seat	1.00	1.00	284	1.00	1.00	284
Hotel-Leisure	180	rooms	0.90	0.95	0.95	0.81	/rooms	1.00	0.95	0.95	0.90	/rooms	0.90	1.00	132	0.90	1.00	146
Employee			0.25	0.95	0.95	0.23	/rooms	0.18	0.95	0.95	0.16	/rooms	0.20	1.00	8	0.55	1.00	16
Residential, Rental, Shared Spaces	168	units	1.50	0.95	0.95	1.35	/unit	1.50	0.95	0.95	1.35	/unit	0.98	1.00	223	0.98	1.00	223
Reserved		sp/unit	0	1.00	1.00	0	/unit	0	1.00	1.00	0	/unit	1.00	1.00	0	1.00	1.00	0
Guest	168	units	0	0.95	0.95	0	/unit	0	0.95	0.95	0	/unit	1.00	1.00	23	1.00	1.00	23
Reserved		sp/unit	0.00	1.00	1.00	0.00	/unit	0.00	1.00	1.00	0.00	/unit	1.00	1.00	0	1.00	1.00	0
Guest		units	0.15	1.00	1.00	0.15	/unit	0.15	1.00	1.00	0.00	/unit	1.00	1.00	0	1.00	1.00	0
ULI base data have been modified from default values.													Customer		2911	Customer		3181
													Employee		757	Employee		629
													Reserved		0	Reserved		0
													Total		3668	Total		3810
													Shared Parking Reduction		46%			44%


Weekday Month-by-Month Estimated Parking Demand - Downtown Allentown Shared Parking Analysis
Parking Stalls
4000
3500
3000
2500
2000
1500
1000
500
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Lat Dec
Month

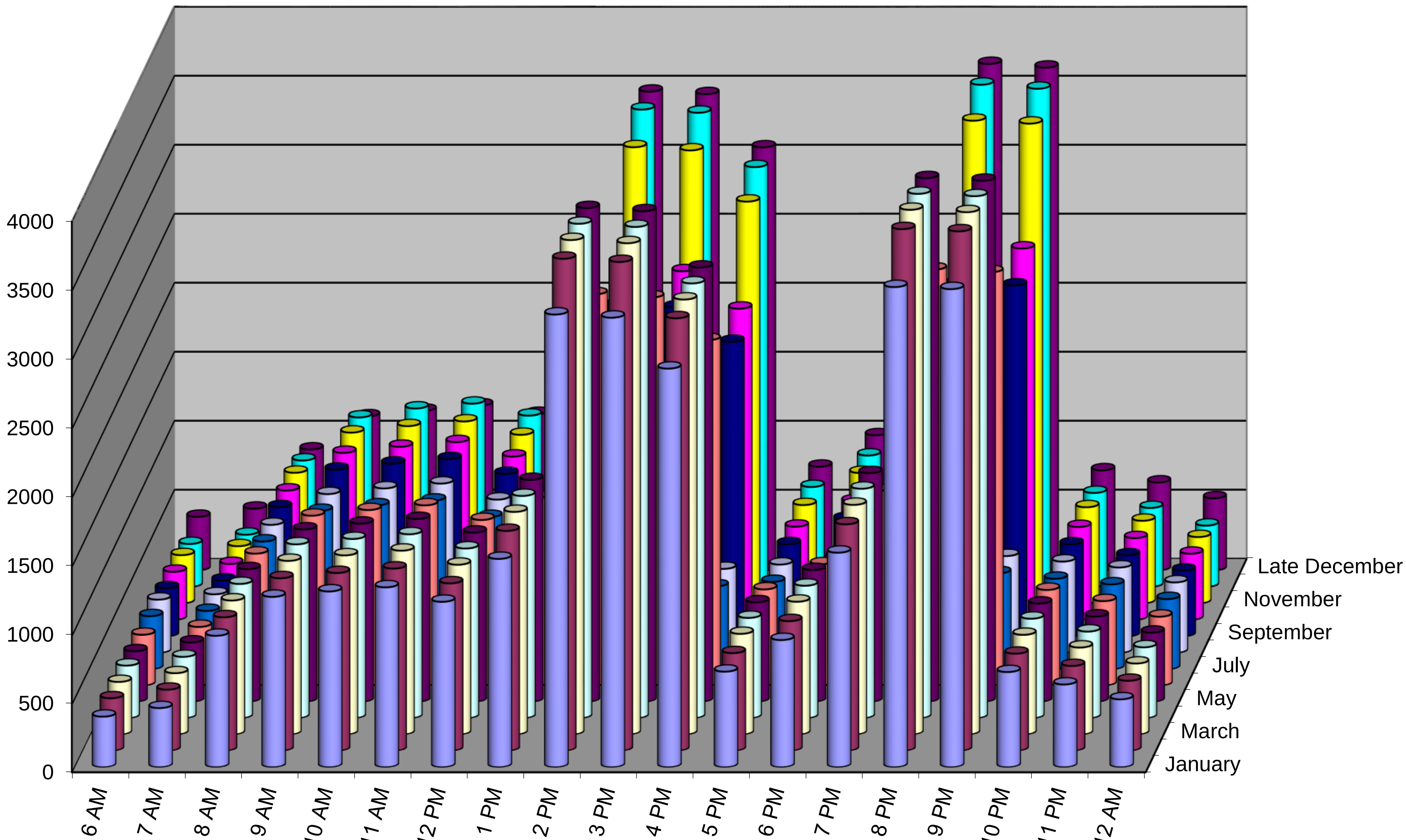


Weekend Month-by-Month Estimated Parking Demand - Downtown Allentown Shared Parking Analysis
Parking Stalls
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Lat Dec
Month

Weekday Comparison by Month and by Hour - Downtown Allentown Shared Parking Analysis



Weekend Comparison by Month and by Hour - Downtown Allentown Shared Parking Analysis



APPENDIX C

ALLENTOWN PARKING AUTHORITY INFORMATION

PARKING INFORMATION FROM THE ALLENTOWN PARKING AUTHORITY
WEEKDAY GARAGE DEMAND SUMMARY

WALNUT DECK (514 Parking Spots)

DATE	9:00 Monthly	9:00 Transient	12:00 Monthly	12:00 Transient	5:00 Monthly	5:00 Transient	7:00 Monthly	7:00 Transient
Wednesday, October 9, 2013	212	93	225	93	36	70	n/a	n/a
Thursday, October 10, 2013	222	105	227	112	41	75	n/a	n/a
Friday, October 11, 2013	180	44	174	58	39	25	18	57
Tuesday, October 15, 2013	217	69	228	82	64	37	19	35
Wednesday, October 16, 2013	228	87	233	73	75	36	64	35
Thursday, October 17, 2013	268	211	271	199	123	48	n/a	n/a
Thursday, November 7, 2013	n/a	n/a	n/a	n/a	n/a	n/a	14	56
Friday, November 8, 2013	n/a	n/a	n/a	n/a	n/a	n/a	9	60
Weekday Daily Total Average	***221***	***102***	***226***	***103***	***63***	***49***	***25***	***49***
Monthly & Transient (Combined)	**323**		**329**		**112**		**74**	

TRANSPORTATION CENTER (470 Parking Spots)

DATE	9:00 Monthly	9:00 Transient	12:00 Monthly	12:00 Transient	5:00 Monthly	5:00 Transient	7:00 Monthly	7:00 Transient
Wednesday, October 9, 2013	107	86	102	119	24	30	n/a	n/a
Thursday, October 10, 2013	102	50	120	47	27	9	n/a	n/a
Friday, October 11, 2013	97	34	106	39	11	12	1	13
Tuesday, October 15, 2013	107	44	122	83	37	26	10	8
Wednesday, October 16, 2013	106	34	137	51	113	39	33	92
Thursday, October 17, 2013	96	50	113	53	34	19	n/a	n/a
Thursday, November 7, 2013	n/a	n/a	n/a	n/a	n/a	n/a	16	9
Friday, November 8, 2013	n/a	n/a	n/a	n/a	n/a	n/a	23	17
Weekday Daily Total Average	***103***	***50***	***117***	***65***	***41***	***23***	***17***	***28***
Monthly & Transient (Combined)	**153**		**182**		**64**		**45**	

GOVERNMENT DECK (445 Parking Spots)

DATE	9:00 Monthly	9:00 Transient	12:00 Monthly	12:00 Transient	5:00 Monthly	5:00 Transient	7:00 Monthly	7:00 Transient
Wednesday, October 9, 2013	178	28	173	26	28	4	n/a	n/a
Thursday, October 10, 2013	178	35	177	36	20	6	n/a	n/a
Friday, October 11, 2013	175	23	159	20	17	9	12	11
Tuesday, October 15, 2013	192	38	174	37	27	14	13	13
Wednesday, October 16, 2013	188	29	173	24	28	8	21	8
Thursday, October 17, 2013	175	35	157	24	36	7	n/a	n/a
Thursday, November 7, 2013	n/a	n/a	n/a	n/a	n/a	n/a	17	3
Friday, November 8, 2013	n/a	n/a	n/a	n/a	n/a	n/a	14	3
Weekday Daily Total Average	***181***	***31***	***169***	***28***	***26***	***8***	***15***	***8***
Monthly & Transient (Combined)	**212**		**197**		**34**		**23**	

SPIRAL DECK (700 Parking Spots)

DATE	9:00 Monthly	9:00 Transient	12:00 Monthly	12:00 Transient	5:00 Monthly	5:00 Transient	7:00 Monthly	7:00 Transient
Wednesday, October 9, 2013	463	25	465	33	131	16	n/a	n/a
Thursday, October 10, 2013	446	22	450	32	119	8	n/a	n/a
Friday, October 11, 2013	438	21	424	24	88	9	13	9
Tuesday, October 15, 2013	459	20	485	33	204	8	96	7
Wednesday, October 16, 2013	460	26	481	34	54	11	10	12
Thursday, October 17, 2013	463	30	456	46	136	11	n/a	n/a
Thursday, November 7, 2013	n/a	n/a	n/a	n/a	n/a	n/a	13	7
Friday, November 8, 2013	n/a	n/a	n/a	n/a	n/a	n/a	0	6
Weekday Daily Total Average	***455***	***24***	***460***	***34***	***122***	***11***	***26***	***8***
Monthly & Transient (Combined)	**479**		**494**		**133**		**34**	

PARKING INFORMATION FROM THE ALLENTOWN PARKING AUTHORITY
WEEKEND GARAGE DEMAND SUMMARY

WALNUT DECK (514 Parking Spots)								
	9:00		12:00		5:00		7:00	
DATE	Monthly	Transient	Monthly	Transient	Monthly	Transient	Monthly	Transient
Saturday, October 12, 2013	15	53	n/a	n/a	12	75	12	75
Sunday, October 13, 2013	12	117	14	19	13	6	12	11
Saturday, November 9, 2013	12	55	12	51	9	57	n/a	n/a
Sunday, November 10, 2013	9	67	9	44	9	44	10	43
Weekend Daily Total Average	*12*	*73*	*12*	*38*	*11*	*46*	*11*	*43*
Monthly & Transient (Combined)	**85**		**50**		**57**		**54**	

TRANSPORTATION CENTER (470 Parking Spots)								
	9:00		12:00		5:00		7:00	
DATE	Monthly	Transient	Monthly	Transient	Monthly	Transient	Monthly	Transient
Saturday, October 12, 2013	4	2	n/a	n/a	29	17	42	37
Sunday, October 13, 2013	0	4	4	4	5	89	5	89
Saturday, November 9, 2013	12	5	13	10	43	45	n/a	n/a
Sunday, November 10, 2013	1	2	9	4	0	4	0	4
Weekend Daily Total Average	*4*	*3*	*9*	*6*	*19*	*39*	*16*	*43*
Monthly & Transient (Combined)	**7**		**15**		**58**		**59**	

GOVERNMENT DECK (445 Parking Spots)								
	9:00		12:00		5:00		7:00	
DATE	Monthly	Transient	Monthly	Transient	Monthly	Transient	Monthly	Transient
Saturday, October 12, 2013	15	9	n/a	n/a	17	0	16	0
Sunday, October 13, 2013	16	3	15	0	14	0	15	0
Saturday, November 9, 2013	16	22	13	15	16	1	n/a	n/a
Sunday, November 10, 2013	15	1	14	0	15	0	1	15
Weekend Daily Total Average	*16*	*9*	*14*	*5*	*16*	*0*	*11*	*5*
Monthly & Transient (Combined)	**25**		**19**		**16**		**16**	

SPIRAL DECK (700 Parking Spots)								
	9:00		12:00		5:00		7:00	
DATE	Monthly	Transient	Monthly	Transient	Monthly	Transient	Monthly	Transient
Saturday, October 12, 2013	8	5	n/a	n/a	3	19	3	20
Sunday, October 13, 2013	5	21	22	4	4	22	4	24
Saturday, November 9, 2013	4	15	7	26	0	32	n/a	n/a
Sunday, November 10, 2013	42	0	42	0	45	1	45	0
Weekend Daily Total Average	*15*	*10*	*24*	*10*	*13*	*19*	*17*	*15*
Monthly & Transient (Combined)	**25**		**34**		**32**		**32**	